NEDA LEIPEN

Athena Parthenos

a reconstruction

ROYAL ONTARIO MUSEUM

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Athena Parthenos

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NEDA LEIPEN
is Curator of the Greek and Roman Department
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Preface

The present study was originally undertaken about ten years ago when the Athenian Public Life Gallery in the Royal Ontario Museum was being planned. Including such visual material as a model of the Acropolis, a diorama of the Agora, and plaster casts of some of the sculpture from the Parthenon, the gallery was designed to illustrate the civilization of classical Athens. A reconstruction of Athena Parthenos, the lost gold and ivory statue made by Phidias for the Parthenon, was to be one of the exhibits. Since the completion of the gallery in 1962 a scale model (approximately 1:10) of the colossal original, representing and incorporating the results of that study, has been exhibited within a likewise reconstructed model of the east chamber of the Parthenon, the original setting of the statue. The gallery has since shown itself to be of great teaching value to students and of more than ordinary interest to the general public.

The complex subject of Athena Parthenos has in the last few years increased in its complexity through additional archaeological evidence in the form of new finds related to the statue, and through added scholarly contributions dealing with the various aspects of the subject. In its present form this publication tries to incorporate all the most recent material both archaeological and bibliographical which contributes to a greater knowledge of one of the most celebrated statues in antiquity. It primarily deals with, and investigates, the material details of the image, since for a reconstruction those are of greatest importance.

A Canada Council grant in 1959 enabled me to examine and study at first hand most of the pertinent archaeological evidence in museums abroad. Subsequent trips to Greece, one of them on a University of Toronto Grant in Aid of Research in the Humanities (1965), have helped to clarify some of the many problems surrounding the subject. The costs of illustrations for the present publication were covered from a recent Canada Council grant (1969) to the Royal Ontario Museum for its general programme of publications.

During all stages of my work I have enjoyed many fruitful exchanges of views, in discussions and by correspondence, with a number of my colleagues at home and abroad. I am particularly indebted to those who have kindly provided me with photographs of the pertinent material in their museums or local collections used in this publication. They are: Prof. Frank Brommer, Archaeological Institute, University of Mainz; Dott. Carlo Carducci for the Soprintendenza alle Antichità del Piemonte, Turin; Mr. H. W. Catling, Ashmolean Museum, Oxford; Prof. Georges Daux, École Française d'Athènes; Mme K. S. Gorbunova, Hermitage Museum, Leningrad; Mr. D. E. L. Haynes, the British Museum; Prof. John Herington, formerly of University of Exeter; Miss Dorothy Kent Hill, Walters Art Gallery, Baltimore; Miss Nada Mandic, Archaeological Institute, Belgrade; Dr. Ristow, Römisch-Germanisches Museum, Cologne; Dr. Elisabeth Rohde, Pergamon Museum, Berlin; Dott. Francesco Roncalli, Museo Gregoriano Etrusco, Vatican; Dr. V. M. Strocka, University of Bochum, Germany; Dr. C. C. Vermeule, Museum of Fine Arts, Boston; Miss Frances F. Jones, Princeton University Museum; Miss Alison Frantz, Princeton; and my colleagues from the German Archaeological Institutes in Athens and Rome, the American School of Classical Studies in Athens, and the Musée d'Art et d'Histoire in Geneva.

During my term at the Institute for Advanced Study in Princeton as Research Associate to Prof. Homer A. Thompson in the spring of 1969, I had the opportunity of discussing the subject in one of the series of Classical Colloquia. For the resulting profitable and stimulating exchange of views I am particularly grateful to Professors Martin Robertson of Oxford, Matthew Wiencke of Dartmouth College, Brunilde Sismondo Ridgeway of Bryn Mawr College, Nicholas Yalouris, 1969 Member of the Institute, Geoffrey Woodhead of Cambridge University, and Homer Thompson of the Institute. With Evelyn B. Harrison of Columbia University I have had many communications particularly regarding the relief on the shield of the statue. Professor Mary White of Trinity College, Toronto, kindly read the manuscript.

My special thanks go to Prof. J. Walter Graham of the University of Toronto and formerly Curator of the Greek and Roman Department at the Royal Ontario Museum who, as the person responsible for the planning and installation of the Athens Gallery, first suggested that I contribute a reconstruction of the Parthenos as one of the exhibits. Throughout my work he has never failed to help with welcome suggestions, advice, or query, and with kind words of encouragement.

Finally I am greatly indebted to my friend and Museum colleague Miss Sylvia Hahn who executed the complex model. Her art training as sculptor and painter, and her experience in modelmaking, casting, and metalworking, were invaluable in producing the

model. Through the actual building of a three-dimensional reconstruction greater insight could be gained into the practical aspects and possibilities of the original, and in this we had an unique and fortunate advantage over the reconstructions attempted in two-dimensional drawings, or those in verbal descriptions only.

Toronto, December 1970

We hope therefore that, supported by the ample archaeological evidence, and standing on the shoulders of several generations of scholars, we have been able to produce a reconstruction which with reasonable adequacy brings to life one of the most famous statues in antiquity.

NEDA LEIPEN

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ArchEph: *Archaiologike Ephemeris*

ArtB: *Art Bulletin*

AthMitt: *Mitteilungen des deutschen Archäologischen Instituts, Athenische Abteilung*

AZ: *Archäologische Zeitung*

BCH: *Bulletin de correspondance hellénique*

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ZfN: *Zeitschrift für Numismatik*

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I. Testimonia

A. LITERARY EVIDENCE[1]

Directly or indirectly ancient writers frequently mention that Phidias was the maker of the gold and ivory statue of Athena in the Parthenon.[2]

More detailed information about the statue itself comes mainly from two sources, Pliny the Elder (23-79 A.D.) and Pausanias (*floruit* about 150 A.D.). The latter, who saw the statue on his travels in Greece, describes it as follows (1.24.5; Overbeck 649):

> αὐτὸ δὲ ἔκ τε ἐλέφαντος τὸ ἄγαλμα καὶ χρυσοῦ πεποίηται. μέσῳ μὲν οὖν ἐπίκειταί οἱ τῷ κράνει Σφιγγὸς εἰκών... καθ' ἑκάτερον δὲ τοῦ κράνους γρῦπές εἰσιν ἐπειργασμένοι... 7. τὸ δὲ ἄγαλμα τῆς Ἀθηνᾶς ὀρθόν ἐστιν ἐν χιτῶνι ποδήρει, καί οἱ κατὰ τὸ στέρνον ἡ κεφαλὴ Μεδούσης ἐλέφαντός ἐστιν ἐμπεποιημένη, καὶ Νίκη ὅσον τε τεσσάρων πηχῶν —, ἐν δὲ τῇ (ἑτέρᾳ Schub.) χειρὶ δόρυ ἔχει, καί οἱ πρὸς τοῖς ποσὶν ἀσπίς τε κεῖται, καὶ πλησίον τοῦ δόρατος δράκων ἐστίν· εἴη δ' ἂν Ἐριχθόνιος οὗτος ὁ δράκων· ἔστι δὲ τῷ βάθρῳ τοῦ ἀγάλματος ἐπειργασμένα Πανδώρας γένεσις. πεποίηται δὲ Ἡσιόδῳ τε καὶ ἄλλοις, ὡς ἡ Πανδώρα γένοιτο αὕτη γυνὴ πρώτη.

"The image itself is made of ivory and gold. Its helmet is surmounted in the middle by a figure of a sphinx . . . and on either side of the helmet are griffins wrought in relief . . . 7. The image of Athena stands upright, clad in a garment that reaches to her feet, and on her breast is the head of Medusa wrought in ivory. She holds a Victory about four cubits high, and in the other hand a spear. At her feet lies a shield, and near the spear is a serpent, which may be Erichthonius. On the pedestal of the image is wrought in relief the Birth of Pandora. Hesiod and other poets have told how this Pandora was the first woman."[3]

This information is supplemented in Pliny (*HN* 36.18; Overbeck 661):

> Phidian clarissimum esse per omnis gentes, quae Iovis Olympii famam intellegunt, nemo dubitat, sed ut laudari merito sciant etiam qui opera eius non videre proferemus argumenta parva et ingeni tantum. neque ad hoc Iovis Olympii pulchritudine utemur, non Minervae Athenis, factae amplitudine, cum sit ea cubitorum viginti sex,—ebore haec et auro constat,—sed in scuto eius Amazonum proelium caelavit intumescente ambitu parmae, eiusdem concava parte deorum et Gigantum dimicationes, in soleis vero Lapitharum et Centaurorum, adeo momenta omnia capacia artis illi fuere. in basi autem quod caelatum est Πανδώρας γένεσιν appellant, di sunt nascentes XX numero. Victoria praecipue mirabili periti mirantur et serpentem ac sub ipsa cuspide aeream sphingem.

"Nobody doubts that Phidias is the most famous in the eyes of everybody who understands the fame of the Olympian Zeus, but in order that also those who have not seen his works know how to praise him deservedly we shall quote proofs small in themselves but of so great a genius. And for that we won't use the beauty of the Olympian Zeus, nor the size of Athena made in Athens, seeing that she measures 26 cubits—of ivory and gold she is made—but on her shield he wrought in relief the battle of the Amazons in the convex area of the shield, and in its concave part the combat of the gods and the Giants, and on the soles that of the Lapiths and the Centaurs, so much was he capable in all parts of art. What is wrought on the base, however, they call the Birth of Pandora, and gods are present 20 by number. The experts particularly admire the wonderful Victory, and the serpent, and under the point of the spear itself the high sphinx."

Apart from reporting on the height of the image, Pliny informs us especially about the relief decoration of the various parts: the shield, the sandals, and the base. Concerning the last, he confirms Pausanias' statement that the birth of Pandora was wrought on it, but adds that 20 gods were present on the occasion.

Another important detail of information, supplied by Plutarch (about 46-120 A.D.), relates to the shield (*Per.* 31, Overbeck 630):

> ... ἡ δὲ δόξα τῶν ἔργων ἐπίεζε φθόνῳ τὸν Φειδίαν, καὶ μάλισθ' ὅτι τὴν πρὸς Ἀμαζόνας μάχην ἐν τῇ ἀσπίδι ποιῶν αὐτοῦ τινα μορφὴν ἐνετύπωσε, πρεσβύτου φαλακροῦ, πέτρον ἐπηρμένου δι' ἀμφοτέρων τῶν χειρῶν, καὶ τοῦ Περικλέους εἰκόνα παγκάλην ἐνέθηκε μαχομένου πρὸς Ἀμαζόνα. τὸ δὲ σχῆμα τῆς χειρός, ἀνατεινούσης δόρυ πρὸ τῆς ὄψεως τοῦ Περικλέους, πεποιημένον εὐμηχάνως, οἷον ἐπικρύπτειν βούλεται τὴν ὁμοιότητα παραφαινομένην ἑκατέρωθεν.

"But the reputation of his works nevertheless brought a burden of jealous hatred upon Phidias, and especially the fact that when he wrought the battle of the Amazons on the shield of the goddess he carved out a figure that suggested himself as a bald old man lifting on high a stone with both hands, and also inserted a very fine likeness of Pericles fighting an Amazon; and the attitude of the hand, which holds out a spear in front of the face of Pericles, is cunningly contrived as it were with a desire to conceal the resemblance which is, however, plain to be seen from either side. . . ."[4]

In this passage Plutarch refers to Phidias' autoportrait and Pericles' portrait which Phidias had apparently included in the Amazonomachy of the shield. The fame of Phidias' works, and his close friendship and great influence with Pericles (Plut. *Per.* 31) provoked great jealousy in the people of Athens: according to Plutarch his irreverent act of including his and Pericles' portrait on the shield of the goddess was the final touch which led to an accusation of embezzlement of the gold of the statue on the part of the master, his subsequent trial, and possibly—here the sources are confused—death in prison.[5]

In addition to these reports which are of primary importance for the general appearance of the statue, a great number of minor sources concern the individual parts of the statue, or supply other information in connection with it. Such, for instance, is the report on the type of the sandal worn by the goddess (Poll. *Onom.* 7.92; Overbeck 666), or on the weight of gold used for the removable gold plating (Schol. Ar. *Pax,* 605; Overbeck 647; Thuc. 2.13; Plut. *De vitando aere* al.2; Diod. Sic. 12.40; Overbeck 655-657). These sources will be considered more specifically in later chapters dealing with the various aspects of the image.

Epigraphic sources for the statue are the public inscriptions from the Acropolis. They contain the building accounts of the gold and ivory image, and the inventory records of treasures kept in the Parthenon. The latter mention only the golden wreath worn by the Nike on Athena's hand, and possibly some statuary from the base of the image. The inscriptions are of little help in a general study of the appearance of the statue.[6]

B. ARCHAEOLOGICAL EVIDENCE

Although many features of the statue are not mentioned or described by the literary sources, these have nevertheless made possible the recognition of copies of the gold and ivory original which itself has long since perished in some unknown way. The copies, ranging in date from soon after the erection of the statue in 438 B.C. until about the close of the third century A.D., were made in a great variety of materials, techniques, and sizes, from colossal marbles to small examples in the minor arts, such as terracottas, metalwork, engraved gems, and coins. Their purpose is probably best described as religious (sometimes clearly of the religious souvenir type), or decorative, though the two cannot always be separated.

Because of the colossal size and the delicate materials of the original none of the marble copies could be an exact reproduction in scale or in detail: a precise copy would have had to be made mechanically from a plaster cast taken from the original, as was the usual procedure from late Hellenistic times onward in copying earlier Greek works.[7] It is certain, however, that no plaster cast was ever taken of the Parthenos. The copies that have come down to us are therefore no more than reflections or adaptations, or—as Furtwängler has called them—abstracts or *resumés*,[8] on a much smaller scale, of the original. Since we must assume that they were made either from sketches or from memory (it is highly improbable that a copyist could have set up his workshop in the sacred cella of the temple), or from other copies, they quite understandably differ one from another, embodying only those features of the original which best suited the purpose of the copy, the skill of the copyist, and the general taste of his time. We must also bear in mind that, as Langlotz in his *Phidiasprobleme* has pointed out, when the majority of the copies were made, the statue was already about 500 years old or older, and certainly not in the same prime condition as in its pristine days,[9] thus possibly obscuring some of the original details even to the ancient observers, and contributing to the discrepancies of the copies.

At best the copies more or less faithfully reproduce the tangible, factual appearance of the statue. Aesthetically they were mediocre in most cases, quite obviously failing to catch and reflect the artistic expression that Phidias, who was especially famous for his statues of the gods, must have given the great gold and ivory Athena in the Parthenon.

A listing of the copies is a convenient starting point in a study of Athena Parthenos, and more or less comprehensive lists have been published from time to time. As a number of copies have been discovered or recognized since the last such list was published some 30 years ago, it seems advisable to revise and republish the list though, of course, no

claim can be made to its completeness.[10] We have tried to include all those copies which significantly, or in certain aspects at least, contribute to a greater knowledge of the original, and have omitted those which reflect it only in a more or less remote degree. A brief description, rather than a mere listing, is given for most of them in view of the later discussion of their individual merit for the reconstruction of the original. Where provenance is unspecified it is unknown or at any rate unstated in the authorities. The statues in the round are listed roughly in order of their size, from under life-size to colossal, and all the copies, regardless of their category, have been numbered consecutively.

MARBLE STATUES

1. *Lenormant statuette* (Figs. 1, 23, 63). Pentelic marble. Total height, 0.42 m; height of base, 0.07 m. Found in Athens, west of the Pnyx, in 1859. The goddess stands upright in a long peplos with a girdled overfold, wearing a helmet on her head. A squarish aegis covers her breasts. Her weight is on her right leg, her left is relaxed and slightly bent at the knee. Her left hand rests on the edge of a round shield with a relief on its exterior (Fig. 23). In the concavity of the shield, between it and the goddess, is a snake with its head and upper body raised. Under the statue's right hand is a large mass of raw marble, and the whole figure is only roughly finished. A frieze with figures in relief is recognizable on the base (Fig. 63). When compared with the information in the sources the helmet shows no decoration, there is no gorgoneion on the breast, no Nike on the right hand, and no spear. The reliefs on the shield and the base, however, though abbreviated and sketchy, show the subjects mentioned in the sources, the Amazonomachy on the former and the Birth of Pandora on the latter. In spite of its shortcomings the statuette was the first recognized copy in the round of the Parthenos. The identification was made by the French scholar Lenormant and was later confirmed by the discovery of the Varvakion statuette (No.2). Various dates, ranging from fourth century B.C. to fourth century A.D., have been assigned to it but late second or first half of the third century A.D. is considered most probable. National Museum, Athens, inv. no. 128. F. Lenormant, *GBA* 8 (1860) 129-150; A. Conze, *AdI* (1861) 334 ff; *id., AZ* 23 (1865) 39 ff; C. Blümel, *JdI* Suppl. 11 (1927) 66, no. 36, pl. 38 b; K. Lehmann-Hartleben, *JdI* 47 (1932) 36-37; Becatti, 11 ff, pl. 64 (for the shield); Brommer, 7, fig. 2; recently and in detail Schuchhardt, 46-53, pls. 33-37; Strocka, 10-14, fig. 1 (shield).

2. *Varvakion statuette* (Figs. 2, 3).[11] Pentelic marble. Total height, including base, 1.045 m; height of base in front, 0.105 m; height of figure alone, 0.94 m. Except for the head of the Nike, which is missing, and certain other minor damage, it is in an almost perfect state of preservation. Numerous remains of colour, chiefly red, brown, and yellow, are still visible. Yellow was probably used as an undercoating for gold, traces of which have been found on the locks of hair. The eyes were elaborately painted still showing black eyelashes, a red-outlined iris, and black pupils. No colour was found on the nude parts. The much less carefully finished back suggests that the statuette was meant to be seen from the front only and that it probably stood in a niche. It was found in December 1880 in Athens, lying face down in a kind of brick vault in a Roman house beside the Varvakion Gymnasium, where it seems to have been stored for protection in ancient times. Shortly after its discovery Frazer described it as follows (313-315):

> The goddess is represented standing upright, resting on the right foot, the left foot being slightly drawn back. Her features are full, rounded and matronly; not wanting in gravity and dignity, but somewhat heavy and expressionless. On the head she wears a helmet with three crests. The central and highest crest is supported by a Sphinx; each of the other crests is supported by a winged horse or Pegasus. The cheek-pieces of the helmet are raised; they are quite plain. The goddess is clad in a long double tunic which reaches to and partly conceals her feet; the upper part of the tunic, folding over the under one, descends to below her waist, and is drawn together at the waist by a girdle, which ends in front in two intertwined serpents' heads forming the clasp. The tunic is sleeveless; the arms of the goddess are encircled at the wrists by serpent bracelets. A scaly aegis, fringed with serpents, covers the breast of the goddess and falls over her back; on the front of it is the Gorgon's head, rudely sculptured. The right arm of the goddess, from the elbow downward, is extended forward, and her upturned hand supports an image of Victory with drooping wings, which faces to the goddess' left, and is therefore in profile to her. The hand which holds the Victory is supported on a pillar of no particular order. The shield of the goddess is set upright on its edge at her left side, and her left hand rests on it.

On the outer side of the shield is carved, in the middle, the Gorgon's head. Otherwise the shield is plain. Between it and the goddess is coiled the serpent with head erect and protruding from the rim of the shield.

Although very close to the ancient descriptions of the original, the Varvakion statuette differs principally from them in showing a support under the Nike, which is not mentioned in the sources, and in lacking the reliefs on the shield, sandals, and base, the griffins on the helmet, and the spear. The statuette is generally dated to the Hadrianic period. Athens, National Museum, inv. no. 129. First published by K. Lange, *AthMitt* 5 (1880) 370-379; *id. AthMitt* 6 (1881) 56-94; *BCH* 5 (1881) 54-63; Schreiber, 550-555, pl. IA; *JdI* 47 (1932) 31-36; latest and very detailed Schuchhardt, 31-46, pls. 20-32.

3. *Statuette in Madrid* (Fig. 4). Italic marble. Height, 0.98 m. Rather well preserved. After the removal of post-classical restorations the following details are missing: the right arm from near the shoulder, the left arm from above the elbow, the front part of the sphinx on the helmet, the spear and the shield. Of other decorative figures on the helmet, and of the cheek-pieces, only traces remain. Of the accessories only the proportionally low base, decorated with a simple profile, is preserved. Drill holes on the front of the helmet and along the edges of the aegis indicate that parts of decoration, now missing, were applied in metal. The eyeballs, now missing as well, were inlaid. The face is leaner and the whole figure is of more elegant proportions than the Varvakion. It differs from the latter and most other copies in the rather prominent modelling of the breasts under the aegis. Hadrianic or Antonine. El Prado Museum, Madrid. Schreiber, 561 ff, Pl. II C; Hübner, *Beschreibung der antiken Bildwerke in Madrid*, 39, No. 10; Amelung, *JOAI* 11 (1908) 196, 203, figs. 73, 74; Klein, *JOAI* 18 (1915) 26, fig. 17; *JdI* 47 (1932) 38 f; Picard, *Manuel* II, 392, fig. 164; A. Blanco, *Museo del Prado, Catalogo de la escultura* (Madrid 1957) 47, No. 47-E, pl. XIX.

4. *Statuette in Belgrade* (Fig. 5). Marble. Total height including base, 0.57 m. Surface rather poorly preserved throughout. Missing is the right hand with part of forearm, the Nike, and parts of decoration of the helmet. The statuette is remarkable in fullness of detail and fineness of execution. The aegis snakes were made of bronze and separately applied. Other details, such as the snakes of the girdle and the decoration of the helmet, are worked out in marble, not always the case in even larger copies. Although closest of all the copies to the Varvakion statuette, it differs from it in the following: the inside of the shield is turned more towards the spectator, thus affording a better view of the snake coiling in its concavity; the support of the shield is higher and differently shaped; there are snake bracelets on both the upper arms and the forearms (on the Varvakion copy the bracelets are low on the forearms only); the face is not as round and heavy. Like the Varvakion, the shield has only a gorgoneion in the middle and no relief of the Amazonomachy. Of Roman date, but perhaps by a Greek artist. Discovered in 1931 near ancient Heraclea Lyncestis, 8 km east of Bitolj, Macedonia. National Museum, Belgrade. H. Schrader, *AA* 47 (1932) 89-97, figs. 1-3; M. Grbić, *Odabrana grčka i rimska plastika u Nar. Muzeju u Beogradu*, Srpska Akademija Nauka, Arh. Inst. 4 (1958) 25-28, pls. 17, 18.

5. *Statuette in Princeton* (Fig. 6). Very fine Pentelic marble. Fragmentary, with only the upper part from just below the waist, and arms to below the biceps preserved. Pres. height, 0.118 m. Fine modelling and skilful handling of marble suggest a Greek work. The full oval face, with a rounded chin and round eyes, though damaged, shows "quiet dignity and calm repose," as expressed by T. L. Shear, *AJA* 28 (1924) 117-119, pls. III-IV. Due to its small size some details are simplified, such as the simple girdle with no snake knots. Found in Athens in the early nineteenth century. The Art Museum, Princeton University, Accession no. 18.

6. *Statuette in Patras* (Figs. 7, 24). Pentelic marble. Preserved height, 0.86 m. Surface generally in good condition. The head, which was made to be inserted in a socket, is missing. Missing also are the right arm and shoulder, most of the left arm, parts of the serpent and of the shield, the right foot, and the drapery at the bottom of the right side. The base is a conventional plinth with no relief decoration. The aegis differs from the usual Parthenos type in that it does not cover the breasts. The copy is important for its shield which shows over a dozen of the relief figures of the Amazonomachy with a gorgoneion in the centre (Fig. 24). The statuette with the lower part of the shield was discovered in Patras in 1896, and the larger fragment of the shield in 1937. Diam. of the shield, 0.45 m. It was considered by Smith to be a Greek, pre-Roman work prior to 279 B.C. when the town was abandoned due to Gaulish invasion but Strocka dates it to the Antonine period. Patras

Museum. C. Smith, *BSA* 3 (1896-1897) 121-148; Lehmann-Hartleben, *JdI* 47 (1932) 27; Becatti, 249 ff, pl. 112, figs. 334, 335 (for the shield); Strocka, 31 ff, fig. 5 (shield) with full bibliography.

7. *The Conservatori torso* (Figs. 8, 25). Luna marble. Height, 0.62 m. Unrestored. Preserved from shoulder to below hips. Arms and attributes, except for a fragment of the shield, are missing. Aegis rather simplified. In other details, such as the snake girdle, the arrangement of the folds in the drapery, and the coiffure (what is preserved of it), it follows the preceding copies. Its chief interest lies in the fragment of the shield which preserves five figures (Fig. 25). Discovered in four fragments on the Esquiline during the construction of the Via Ariosto in 1874. Carefully executed but uninspired Roman work of the later second century A.D. Museo Nuovo of the Musei Capitolini, Rome. Inv. no. 916. Schreiber, 564-567, pl. III, E 1-3; *A Catalogue of the Ancient Sculptures Preserved in the Municipal Collections of Rome, Palazzo dei Conservatori*, by Members of the British School at Rome, ed. by H. Stuart Jones (Oxford 1926) 102, pl. 37, fig. 44; Becatti, 111, fig. 194 (for the shield); Helbig[4], No. 1762; Strocka, 27 ff, fig. 4 (shield).

8. *Statue in the Villa Borghese.* Pentelic marble. Preserved height of figure, 1.03 m. Unrestored. Missing head and arms were separately attached. Girdle of snakes with a knot in front and back; scaled aegis. Folds deeply undercut. Soles of sandals decorated with braid motif in relief on upper and lower edges. Careful Roman work, probably of the second half of the first century A.D. Villa Borghese, Rome. Inv. 546. Schreiber, 572-573, pl. IV H; Helbig[4], No. 1980.

9. *The "Enneakrounos" torso.* Marble. Preserved height, 0.28 m. Head, arms, and feet are missing. In all essentials it agrees with the Varvakion statuette. A deviation is an awkward bow replacing the snake girdle. Discovered during German excavations of the west slope of the Acropolis in 1892-3. National Museum, Athens. W. Dörpfeld, *AthMitt* 19 (1894) 148; H. Schrader, *AthMitt* 21 (1896) 284, No. 8.

10. *Torso in Budapest.* Marble. Preserved height, 0.252 m. Head and both arms, which were separately attached, are missing. Girdled higher than the Varvakion, in other details agrees with it. Found on the island of Chios. A charming work of the Hellenistic period. Museum of Figurative Art, Budapest. A. Hekler, *Sammlung antiker Skulpturen, Museum der Bildenden Künste in Budapest* (Budapest 1929) No. 71.

11. *Statuette in the Depot of the Acropolis Museum.* Pentelic marble. Preserved height, 0.33 m (complete height was about 1 m). Upper part of torso from neck to hips preserved. Aegis with gorgoneion shaped as on the Varvakion. Drill holes remain on its lower edges where metal snakes were inserted. Forearms and head, now missing, were attached separately. A deviation from the Parthenos type is the Ionic chiton with buttoned sleeves and a girdle without a knot. Roman work. Acropolis Museum. Praschniker, *JOAIBeibl* 37 (1948) 3, fig. 3.

12. *Statue from Argos* (Fig. 9). Preserved height, 0.85 m. Right arm preserved down to elbow, left arm broken off at shoulder. Head, worked separately, missing. The stance and the costume follow in general the Parthenos type though the drapery is somewhat more freely worked. The aegis does not conform to the usual ample squarish shape being rather short and formed more like a collar leaving the breasts free and approaching in this the statue from Patras (No. 6). Another detail, unusual for the Parthenos tradition though common for the period, is the crinkled edges of the chiton along the open right hand side. Broken off marble braces at the left hip and ankle supported the arm and probably the shield; faint traces of another brace at the right hip. The latter might have supported the column but since the plinth is broken off in front this remains uncertain. Found in 1956 between the Theatre and the present Gounaris street in Argos. Of local Argive production of the second century A.D. In the Argos Museum. *BCH* 87 (1963) 57 ff, fig. 22; 90 (1966) 48 ff.

13. *Statuette in Rome.* Height of statuette, 0.75 m; height of plinth, 0.06 m. Head and right forearm missing. The figure stands on a rounded plinth. The shield, supported by the left hand, stands on a fairly high, profiled stand. Though doubtless Parthenos, it is late and modified showing high girdle and lack of typical fold from left knee. It also exhibits an unusual downward-widening shape of the aegis, and a totally different arrangement of snakes. Unique feature is a small owl standing at goddess' right foot. Shown at an exhibition of ancient sculpture at Bergamo in 1958, and offered for sale on the Roman market the following year. Roman, probably post-Antonine. E. Paribeni, *Mostra di sculture antiche* (Bergamo 1958) No. XV; Herbig, *RömMitt* 66 (1959) 138 ff, pl. 34.

14. *Statue in the Villa Wolkonsky, Rome.* Height from shoulder to base, 1.34 m. Head and arms missing. Scaled aegis. Rather clumsy workmanship, snakes on aegis and girdle particularly badly executed. In the garden of the Villa Wolkonsky (present British Embassy), Rome. Schreiber, 563, pl. III D.

15. *Statue from Gortyn* (Fig. 10). Height, 1.40 m. Head missing. The forearms, worked separately and now lost, were attached to the upper arms by means of dowels. All breaks are ancient. The lightly scaled aegis with marble serpents along the edges, the knotted serpent girdle, and the arrangement of hair in front and at the nape, follow most other copies. Noteworthy are the remains of a marble brace low on the right hip which may have braced the column under the right hand. A good Roman copy of the second century A.D. The statue was found in Gortyn, Crete, in 1950. Heraclion Museum, Crete. D. Levi, *BdA* 36 (1951) 356, fig. 49; N. Platon, *A Guide to the Archaeological Museum of Heraclion* (Crete 1955) pl. XVI, 2, No. 347.

16. *Statue in the Mariemont Museum.* Pentelic marble. Height, 1.35 m. Left foot, head, and arms missing; back damaged; square plinth largely modern. The square-shaped, rather short, aegis has a rolled border. Unusual is the treatment of the gorgon's hair in a radiating arrangement around the head differing from the usual Phidian representation in which the hair is parted in the centre and waved. From Rome. Formerly in the Somzé Collection, now in the Mariemont Museum. Inv. no. B.146. *Les Antiquités du Musée de Mariemont* (Bruxelles 1952) 67, G 7, Pl. 22; P. Lévêque and G. Donnay, *L'Art du Musée de Mariemont* (Bordeaux 1967) No. 39.

17. *Torso from the Acropolis* (Fig. 11). Pentelic marble. Preserved height (from shoulder to lower part of peplos), 1.57 m. Surface rather badly preserved. Head and neck, arms, and attributes are missing; back only roughly finished. Remains of a brace on the right thigh(?). Aegis and the folds of drapery more independently treated but doubtless a copy of the Parthenos. Found in 1860 near the Propylaea. Believed to date not very long after Phidias. Acropolis Museum, Athens. Inv. no. 1362. Schreiber, 573 ff, pl. IV, I; S. Casson, *Catalogue of the Acropolis Museum* (Cambridge 1921) II, 260.

18. *Torso in Baltimore* (Fig. 12). Fine-grained white marble (not Pentelic). Height, 0.98 m. Preserved from shoulders to knees. Interesting is the indication of the two materials of the original by the use of some different, now missing, material for the flesh parts of the statue. The statue may have been gilded. Closely comparable to the Gortyn copy (No. 15) in the shape of the aegis. Dated to the Hellenistic period, probably first century B.C. Made somewhere in the eastern part of the Mediterranean and brought to Rome in ancient times. Until 1902 part of the Massarenti collection in Rome. Walters Art Gallery, Baltimore. D. K. Hill, *ArtB* 18 (1936) 150-167.

19. *"Minerve au Collier"* (Fig. 13). Parian Marble. Height, 2.10 m. The head, worked separately and inserted into the statue, is of Pentelic marble. Arms, wrongly restored in modern times, have been removed. The decoration of the helmet only partly preserved: the central of the three figures on top of the helmet was a sphinx, the two lateral ones cannot be identified with certainty. The projecting pieces of marble on the front part of the helmet are traces of animal protomai. This feature is confirmed by the Madrid statuette, but there the protomai applied in metal and lost, have left only holes behind them. Animal protomai over the brow-band are a regular detail in copies in minor arts. Almost nothing is preserved of the cheek-pieces. The aegis is scaled, the serpents along its edges rather crudely executed in marble. Nose and mouth are a modern restoration. The string of pearls round the neck (hence the nickname) is in large part a modern restoration to conceal a break. A simple base. Brought to the Louvre from the Villa Borghese, Rome. Style rather rigid and cold. Probably first century A.D. In his early publication of the statue Froehner did not recognize it as a copy of the Parthenos although some archaizing features, such as the hair falling in long locks on the breast, had caused him to observe that "il paraît probable que notre statue est une imitation de quelque idole célèbre." W. Froehner, *Notice de la Sculpture Antique, Musée Imperial du Louvre* (Paris 1869) 142-3; Schreiber, 567-571, pl. III, F 1-2; Michon, *MonPiot* 7 (1900) 160, n. 8, figs. 1-2; Picard, *Manuel* II, 386, n.1; 391-2.

20. *Statue by Antiochos* (Figs. 14, 21). Pentelic marble. Height, 2.35 m. The heavy muscular arms are a false restoration of the seventeenth century. Also reworked at that time were the drapery, the helmet, and the aegis, and the latter two were deprived of most of their decoration. The head is carefully executed and is much more pleasing than the rest of the statue. The curls on the temples and the locks on the

breasts however are rendered in a rather petty style differing from that on other copies (Fig. 21). A Greek copyist, [An]tiochos, signed his name on the peplos of the goddess near the right foot. A Neo-Attic work of the late Republican or early Imperial period. Formerly in the Ludovisi collection. Museo Nazionale, Rome. Schreiber, 556-561, pl. II, B 1-2; *id.*, *Die antiken Bildwerke der Villa Ludovisi*, 135, No. 114; E. Paribeni, *Museo Nazionale Romano, Sculture Greche del V Secolo* (Rome 1953) 59, No. 103; Helbig[4], No. 2328.

21. *Statue from Pergamon* (Figs. 15, 22, 64). Height, 3.51 m. The largest of the preserved marble copies. Missing are both arms, both feet, and the lower part of the peplos. Important because it is the only other copy besides the Lenormant statuette (No. 1) showing the relief figures on the base (Fig. 64). Otherwise it is a rather free Hellenistic adaptation. It was erected in the second century B.C. as a decoration for the Library at Pergamon. Excavated in 1880. The Pergamon Museum, Berlin. F. Winter, *JdI* 22 (1907) 55-70; *id.*, *Altertümer von Pergamon*, VII (Berlin 1908) 33-46; *JdI* 47 (1932) 21-27; Picard, *Manuel* II, 166, 383, 396, fig. 159; Brommer, 9-11, pl. 1; Becatti, fig. 32.

22. *Fragments from the temple of Athena at Priene.* Four marble fragments of a colossal statue:
a) left foot which probably wore straps of a bronze sandal and half emerged from the flowing folds of a long chiton. Breadth, 0.37 m; length, 0.30 m.
b) fragment of right foot consisting of great toe and base of the next two toes. Breadth, 0.375 m; length, 0.30 m..
c) left upper arm from the curve of the shoulder to the bend of the elbow. Lower end has large dowel hole for attachment of forearm. The inner side of the arm worked flat for attachment to the body. Length, 1.20 m. Appears to have suffered from fire, restored from 93 fragments.
d) left hand. Fingers and upper part of thumb missing. The palm spread open. Length, 0.51 m.
e) pair of bronze wings. Chased. Belonging probably to a statue of Nike. Traces of gilding and of charred wood. Corroded. Length of one, 0.735 m; width, 0.25 m; length of the other, 0.565 m; width, 0.22 m.

Judging by the scale of the fragments the figure of Athena was about 6.60 m. high, the Nike about 0.90 m. The statue is presumed to be the one of Athena Polias mentioned by Pausanias (7.5.5). The probable date of about mid-second century B.C. for the erection of the statue is determined by a find of six tetradrachms of Orophernes II (158 B.C.) beneath the foundation stones of the base. The statue was reproduced on coins from Priene under Severus Alexander (222-235 A.D.) and under Valerianus (254-260 A.D.) (Fig. 41). *BMCat Coins Ionia*, 234-5, Nos. 55, 57, 58, pl. XXXIV, 13. In the British Museum. For marble fragments, *BMCat Sculpture* II, 1150; for bronze wings, *BMCat Bronzes*, 1728; C. T. Newton, *Antiquities of Ionia* IV (London 1881) 26, 29, 31, pl. XXIV, 13; T. Wiegand and H. Schrader, *Priene* (Berlin 1904) 110 ff; Dressel, *SBBerl* 1905, 467 ff.

23. *Fragments from the temple of Athena at Notion* (on the Lydian coast). Only fragments of the colossal cult statue remain: the left shoulder and breast, and part of the drapery. The goddess wore a peplos with overfold and an aegis decorated with metal snakes (a row of holes on the breast show where these were attached). Closely comparable to the Pergamon statue. Hellenistic or Roman. *BCH* 49 (1925) 323, fig. 1; Peschka, *Summary*, 25.

Of another marble copy only a drawing in the Codex Pighius (seventeenth century) is preserved, Schreiber 571, pl. III G: it resembles the Baltimore statue (No. 18) but is considered to be of another statue.

MARBLE HEADS

24. *Berlin* (Figs. 16, 17). Greek marble. Height, 0.355 m. Sphinx, pegasoi, animal protomai (a total of five), and cheek-pieces of the helmet are all preserved in a more or less fragmentary state. The lower edge of the brow-band of the helmet follows the line of the eyebrows pointing in the centre toward the root of the nose. The teeth are represented between the slightly parted lips. The head is important for its polychromy showing traces of dark brown (for the iris), red (for hair), yellow, black, and gold. The flesh parts are polished. Made to be let into a statue. Detailed and accurate but cold and lifeless. Roman work of the Hadrianic period. Found in Rome in 1885 together with another fragment of the statue, the left foot on a plinth. Pergamon Museum, Berlin (East). *Staatliche Museen* IV, K 170, 31, pl. 58, 59; Becatti, 110, pl. 63, figs. 187, 189.

25. *Copenhagen* (Fig. 18). Pentelic marble. Height, 0.37 m. Nose and lips badly damaged, the sphinx of the helmet almost entirely gone. Larger fragments of the pegasoi remain. The brow-band shows traces of animal protomai; its lower edge points toward the root of the nose. The modelling of the screw-locks in

front of the ears clearly suggests a metal prototype. Bronze pins in the upper part of the helmet and a small dowel hole in the nose are traces of an ancient restoration. The head differs from most other heads in that the cheeks are somewhat leaner and the chin is less round and soft. Ny Carlsberg Glyptotek, Copenhagen, where it came in 1900 from a German private collection. Pollak, *JOAI* 4 (1901) 147 ff, pl. IV, fig. 171; *Ny Carlsberg Glyptotek, Kat. Antike Kunstvaerker* (Kjφbenhavn 1907) pl. VIII, 98; Brommer, 15, pl. 7 and cover.

26. *Paris* (Fig. 19). Coarse-grained marble. Height, 0.345 m. Nose and upper lip badly damaged. In detail very similar to the Copenhagen head. Traces of five animal protomai in front, remains of a sphinx on top, two pegasoi on either side of the helmet. Upturned cheek-pieces decorated with griffins in relief. Features are massive and simple, the chin more rounded and accentuated than in the Copenhagen head. The head was worked separately to be let into a torso. Roman workmanship. Found in the remains of a rich Roman villa near Cività Vecchia. Acquired by the Louvre in 1898. Michon, *MonPiot* 7 (1900) 153-173, pl. xv; Petersen, *RömMitt* 10 (1895) 92; Picard, *Manuel* II, 387, fig. 162; Becatti, 110, pl. 63, fig. 184.

27. *Cologne* (Fig. 20). Pentelic marble. Preserved height (from middle of neck to bottom of sphinx), 0.26 m. Heavily chipped; black discoloration in spots. Traces of three large and four small animal protomai alternating on the helmet. As on the Berlin, Copenhagen, and Paris heads, the brow-band of the helmet is triangular with the point reaching between the eyes. The back of the helmet shows a symmetrical spiral ornament. Discovered in Cologne in 1882. Römisch-Germanisches Museum, Köln (Cologne). U. Köhler, *JdI* 4 (1889) 47 (where it was first recognized as head of Athena Parthenos); Loeschcke, *Festschrift*, 1-22, pl. 1-3.

28. *Head from South Italy*. Greek island marble. Height, 0.48 m. Decoration of helmet simplified, reduced to the sphinx only. In details of coiffure follows other examples, as well as in the shape of the brow-band. The head was made to be let into a torso. Found in South Italy. In Prof. Pollak's possession in 1901. Pollak, *JOAI* 4 (1901) 148 ff, fig. 172.

29. *Small head "A" in the Acropolis Museum*. Pentelic marble. Height, 0.06 m. Broken off a statuette. Though damaged it preserves traces of polychromy on eyes and hair, and a very smooth polish on the face. Clumsy work of the Roman period, on about the same scale as the Lenormant statuette (No. 1). Pollak, *JOAI* 4 (1901) fig. 173; G. Dickins, *Catalogue of the Acropolis Museum*, I (Cambridge 1912) 188, No. 647.

30. *Small head "B" in the Acropolis Museum*. Parian marble. Height, 0.095 m. Broken off a statuette. Central (and only) crest missing, otherwise very well preserved. Definitely Parthenos type though deviating in hairstyle with hair framing the forehead, a straight lower edge of brow-band and only one crest. Beautiful and fresh original Greek work judged nearly contemporary with Phidias. Dickins, *op. cit.*, No. 635; Furtwängler, *AM* 6 (1881) 187-190, pl. VII, 2.[12]

MARBLE RELIEFS

Most marble copies in relief are limited to the copies of the shield or details of it. In addition to the *Lenormant, Patras*, and *Conservatori* shields (Figs. 23, 24, 25), which were found together with the statues to which they belong (Nos. 1, 6, 7) and have been mentioned earlier, the following were found independently:

31. *The Strangford shield* (Figs. 26, 27). Pentelic marble. Diam., 0.50 m. Left upper part missing leaving about two thirds of the disc preserved with 18 figures of the Amazonomachy, 12 complete and 6 fragmentary. In the centre, a gorgoneion, framed with snakes. Noteworthy are the figures of "Phidias" and "Pericles" below it (Fig. 27). Interior shows traces of a painted Gigantomachy. There are also traces of colour, particularly yellow (for gold in the original), on weapons and armour of the figures on the exterior. Obtained by Viscount Strangford in Athens in the first half of the nineteenth century. Roman, probably first half of the third century A.D. British Museum. First recognized as a copy of the shield of Athena Parthenos by A. Conze, *AZ* 23 (1865) 33 ff, pls. 196-197; *BMCat Sculpture* I (1892) No. 302; S. Ras, *BCH* 68-69 (1944-45) 163 ff, pls. 19, 20; Becatti, 111ff, pl. 64, figs. 191, 192; Richter, *Portraits* I, 150, fig. 849; Strocka, 14-22.

32. *Fragment in the Vatican* (Fig. 28). Pentelic marble. Roughly triangular fragment, comprising a left upper segment of the shield. Estimated diam. (incl. rim), about 0.90 m; preserved length of lower edge, 0.35 m; of upright edge, 0.41 m. Six figures of the Amazonomachy remain, three complete, one

fragmentary, two traces only. Remains of a gorgoneion. Provenance unknown but considered probably Attic, of Neo-Attic workmanship of about first century B.C. Museo Chiaramonti. Inv. no 1738. S. Ras, *BCH* 68-69 (1944-45) 175 ff, pl. 20; Becatti, 111 ff, pl. 65, fig. 193; Helbig[4], No. 357; Strocka 22-27.

33. *Fragment in Boston* (Fig. 29). Greek island marble. Of roughly square shape, with maximum height of 0.12 m, maximum width 0.125 m, preserving a portion of upper edge of the shield to the right of the centre. The fragment contains one figure only, the so-called Capaneus, kneeling on the right knee, with mantle and shield on left outstretched arm. His attitude and place on the shield are approximately the same as on the Patras copy (Fig. 24); the attitude is repeated also on the reliefs in Piraeus, Chicago, and Rome (see No. 34 below). Museum of Fine Arts, Boston. Inv. no. 76.740. Brommer, *Gnomon* 30 (1958) 352; Vermeule, *AJA* 68 (1964) 326, pl. 97, 5; Strocka, 37 f. suggesting that it is a part of the Conservatori shield (Fig. 25).

34. *Reliefs from the Piraeus* (Figs. 30-36). Pentelic marble. About two dozen panels, all more or less fragmentary. Average height, 0.90 m; length, 1.65 m; height of figures, 0.70-0.80 m. Fairly high relief. All of the slabs are framed with a heavy profiled edge, and were obviously intended as separate decorative pieces. The scenes are excerpts from the Amazonomachy of the shield, representing, it appears, not more than two figures at a time, usually a combatant pair of a Greek and an Amazon. The reliefs were discovered in the winter of 1930-31 during dredging operations in the harbour. They were gathered there in antiquity to be shipped, probably to Rome, but some catastrophe (most probably a fire to judge by the traces of burning) caused the entire boatload to sink while still in the harbour. Most are now in the Piraeus Museum but some, discovered at a different time but believed to have belonged to the same shipment, or at least to the same lot from the same workshop, are in Rome, Chicago, Copenhagen, and Berlin. Illustrated here are Greek archer in chlamys and Amazon, from the Piraeus Museum (Fig. 30); Greek pursuing an Amazon and pulling at her hair, from the Piraeus Museum (Fig. 31); pair of Greek in chlamys and Amazon with round shield, from Copenhagen (Fig. 32); seated Amazon seen from the back, from the Piraeus Museum (Fig. 33); "Capaneus" from Villa Albani, Rome (Fig. 34); Amazon drawing sword, from the Piraeus Museum (Fig. 35); Amazon fallen head first, from the Piraeus Museum (Fig. 36). The reliefs date from about the middle of the second century A.D. (Hadrian or early years of Antoninus Pius), and are Neo-Classical in style. Schrader was the first to recognize them as copies of the individual figures from the shield of the Parthenos, *SBBerl* XI, 1931, 185 ff; *id. Corolla Ludwig Curtius* (1937) 82 ff; F. Stavropoulos, Ἡ ἀσπὶς τῆς Ἀθηνᾶς Παρθένου τοῦ Φειδίου (Athens 1950) reviewed by H. Möbius, *Gnomon* 23 (1951) 268; Becatti, 246-248, pls. 66-68 illustrating most of the reliefs. For the reliefs in Rome and Chicago with "Capaneus" cf. A. D. Frazer, *AJA* 43 (1939) 447 ff; 41 (1937) 109; Picard, Manuel II, 1 (1939) 394 f. For the Copenhagen piece, F. Poulsen, *Ny Carlsberg Glyptotek, Kat. over antike Skulpturer* (Kjøbenhavn 1940) No. 57a, pl. V; for the piece in Berlin, *Staatliche Museen* V, 33, K 252, pls. 73, 74. The most recent is the study by Strocka, very detailed and giving drawings of all the fragments including the profiles of all the frames. Strocka, 39 ff.[13]

To these reliefs, which copy the shield only, the following Attic relief should be added:

35. *Relief in Berlin* (Fig. 37). Pentelic marble. Height, 0.233 m; width, 0.21 m. Broken off at left side and bottom. Represented is Athena Parthenos and a priestess. Though of superficial workmanship the relief is important because it shows a pillar under the right hand of the goddess carrying the Nike. Attic, fourth century B.C. *Staatliche Museen* III, 72, K 104, pl. 83.

For other Attic reliefs, more or less influenced by Athena Parthenos, cf. Robinson, *AJA* 15 (1911) 511.

The statue greatly influenced the minor arts, and was copied by gem and die engravers, metalworkers and jewellery makers, koroplasts, and potters.

ENGRAVED GEMS

36. *Gem by Aspasios* (Fig. 38). Red jasper. Oval, maximum height, 3.1 cm; maximum width, 2.3 cm. Bust of Athena Parthenos in profile to right. Signed ΛCΠΛCIOY. The three crests of the helmet are supported by a sphinx and two pegasoi; a griffin on the cheek-piece. Motif of scrolls on the back of the helmet, of scales on the neckpiece of the helmet. Animal protomai, alternating deer and pegasoi, protruding in front of helmet. Cluster type earrings and a triple necklace. Locks in front of ear, two long locks on the shoulder. A chignon in the back. The

spear, leaning against the left shoulder, is caught in the coil of one of the snakes from the aegis. Formerly in Vienna, now in the Museo Nazionale, Rome. Furtwängler, *AG*, 235, pls. XLIX, 12; LI, 16; W. Lübke, E. Pernice, B. Sarne, *Die Kunst der Griechen* (Vienna 1948) 236; Becatti, pl. 63, fig. 188. Furtwängler considers the head on this gem the most exact and complete of all the preserved copies of the head.

37. *Gem in the Metropolitan Museum.* Plasma. Height, 1.3 cm. Standing figure is shown dressed in a girdled peplos, aegis, and crested but otherwise undecorated Corinthian (?) helmet. She touches lightly the shield resting at her left. The spear is leaning against her left forearm. A winged Nike, holding a wreath, is on her right hand. The serpent and the column under the Nike are not represented. Roman period. Richter, *Gems*, No. 269, pl. 39, considers this gem strong evidence against the column in the original.

For other less important gems and pastes with a representation of the Parthenos cf. Robinson, *AJA* 15 (1911) 501; *JOAI* 4 (1901) 148 ff, fig. 175.

COINS AND TOKENS

The statue of Athena Parthenos influenced the coinage of many cities from the late fifth century B.C. to the late Imperial period. The best and fairly recent survey is given by Lacroix, 226 ff. Important older works are by Lermann and Imhof-Blumer, 22-24, pl. LXXIV, Y, Nos. xviii-xxv. Lacroix believes that, as far as the head of the statue is concerned, the first true and intentional copy of it is seen on the Attic "new style" tetradrachms the earliest issue of which, as has now been established by Margaret Thompson, date from the early second century B.C.[14] (Fig. 39). Earlier coins with the head of the Parthenos type, issued by the various cities in Italy, Greece, and particularly Asia Minor, Lacroix considers to be only reminiscent of the statue. They indeed show much freedom in the treatment of the detail, particularly regarding the helmet, and contribute little to the knowledge of the original. The Attic "new style" tetradrachms were soon copied by various provinces (Crete, Macedonia, Thessaly, Ionia, Pontus, Paphlagonia) while in Athens they continued to the time of Augustus.

The earliest reproductions of the full figure can be seen on the coins of the first half of the fourth century B.C. from Side in Pamphylia and Nagidus in Cilicia but these, as Lacroix suggests, are probably not direct copies and reproduce a local version of the original. Grose III, No. 8917, pl. 317, 1; *BMCat Coins Lycia Pamphylia Pisidia*, pl. 26, 7-11; Gardner, *Types*, pl. X, 28. The type becomes very popular in Hellenistic and Roman times in Athens and elsewhere. *Hesperia* 27 (1958) 155.

Very important for our study are the coins showing a support under the hand carrying the Nike. One such is the above mentioned silver coin of *Nagidus in Cilicia*, of about 375 B.C. (Fig. 40). Imhof-Blumer, pl. Y, xxii; *BMCat Coins Lycaonia Isauria Cilicia*, pl. XIX, 14; Dinsmoor, *AJA* 38 (1934) 104, fig. 4. Others are bronze coins of Priene from the time of Severus Alexander and Valerianus, *BMCat Coins Ionia*, Nos. 55, 57, 58, *pl.* XXIV, 13 (Fig. 41). The support on all of these coins is in the form of a tree-trunk with lopped branches.

A Greek lead token with the column under the Nike is illustrated in Jahn Michaelis, *Arx Athenarum a Pausania descripta* (Bonn 1901) pl. XXXV, No. 6; *ZfN* 10 (1883) 152 .Two other tokens from Athens, *Agora* X, L 244 and *BCH* 81 (1957), show an owl (?) and a tree (or a column or altar) respectively under the right hand of the statue.

JEWELLERY AND METALWORK

38. *Two gold medallions with pendants from South Russia*, hereafter referred to as Hermitage medallions (Fig. 42). Diameter, 0.072 m. Chased over a stamp and later tooled. From the usual representation of the head the medallions differ mainly in the presence of an owl sitting on the left upturned cheek-piece of the helmet (on the right in the companion piece which is worked like a mirror image of the first). As on the Aspasios gem the spear is held by an aegis snake on the left shoulder. Of the ten animal protomai on the front part of the helmet five are thought to be griffins, and five deer or stags. Unlike the Aspasios gem (No. 36) or the "new style" tetradrachms the medallions show only heads of animals rather than the entire front part with forelegs protruding. The face is full and heavy as on the Varvakion statuette. The goddess wears a triple necklace and earrings. The medallions are important for the knowledge of the head. They were found in 1830 in a tomb in the Koul-Oba tumulus near Kertch on the breast of a female skeleton. The tomb context dates them not later than the middle of the fourth century B.C. Hermitage Museum, Leningrad. Published in detail by Kieseritzky, *AthMitt* 8 (1883) 291 ff, pl. 15; E. Minns, *Scythians and Greeks* (Cambridge 1913) 195, fig. 88; R. A. Higgins, *Greek and Roman Jewellery* (London 1961) 128, fig. 29.

Several other representations of the Parthenos on jewellery were found in South Russia, and are quoted by Robinson, *AJA* 15 (1911) 502. I have not been able to examine the references given but by Robinson's brief descriptions they do not seem to add anything important to the study of the original.

39. *Two medallions in the Louvre* (Fig. 43). Similar but not identical. Bronze, chased and gilded. Diameter, about 0.10 m. Helmeted head of Athena, facing. Upturned cheek-pieces decorated with floral motif; a winged sphinx supporting the central crest, griffins the side crests. The inferior but more complete example illustrated here includes the scaled aegis with a gorgoneion in the centre and, as an unusual feature, two winged genii or victories holding Athena's earrings. It is bordered with a double guilloche motif. The less complete but artistically superior of the two examples including only the head and neck below the necklace dates from the fourth century B.C. It shows the typical disc-and-pendant earrings. Both medallions show a similar necklace consisting of a row of beads and a row of pendants below and in both the face is round and heavy. Probably decoration of the lid of a pyxis. A. Aymard and Jannine Auboyer, *L'Orient et la Grèce Antique, Histoire Générale des Civilisations* (Paris 1957) I, 691, pl. 42; J. Charbonneaux, *Greek Bronzes* (Engl. tr.) (London 1962) 68, pl. IX, 2.

40. *Three medallions in the Volos Museum.* Chased gold. Diameter, 0.035 m. The identical discs bear the head of Athena, turned slightly to her left. The three-crested helmet suggests the Parthenos but her usual minor attributes (earrings, necklace, decoration on the helmet) are not represented. The hair, in a rich sideways flowing arrangement, differs from the usual Parthenos style in which locks fall on either shoulder. A gold wire loop protruding from the bottom edge of the medallion served for attachment of a pendant. Found in the fourth century B.C. tombs at Demetrias in 1961.

Among the gold rings with Athena Parthenos deserving separate mention is the

41. *Ring in the British Museum* with the bust on the circular embossed gold bezel. Fourth-third century B.C. *BMCat Finger Rings,* No. 222. Cf. also No. 224 of the same period with a bust of Athena in triple-crested helmet and chiton with aegis worked in gold in high relief.

TERRACOTTAS

42. *Statuette from Switzerland* (Fig. 44). Coarse red clay covered with white slip. Height, 0.19 m. Solid except for a circular depression (about 0.04 m deep) under the base. Crude but remarkably close to the Varvakion in detail, the only new feature introduced being a himation falling obliquely from the shoulder to the right hip. Until recently the only copy in the round, beside the Varvakion, showing the column. Its form, although crudely executed, corresponds very closely to the column of the latter. The square base is inscribed: A Θ H N A. Gallo-Roman work. Known since 1870 (Varvakion discovered 1880). Acquired by the Musée d'Art et d'Histoire in Geneva in 1916 from the original owners on whose property in Switzerland it is said to have been found. Deonna, *REA* 21 (1919) 20-26, pl. I where it is judged as authentic, in my opinion on good grounds.

43. *Statuette from Tarsus.* Brownish, coarse clay with traces of slip on face and drapery; traces of black on helmet, pink on drapery. Height, 0.15 m. Right side, legs below knees, and most of shield missing. Prominent triple-crested helmet; high-girt chiton with overfold. Very reminiscent of the marble copy from Pergamon (No. 21). H. Goldman, Ed., *Excavations at Gözlü Kule, Tarsus* (1950) I, 313, No. 32 (35-598), fig. 214.

44. *Statuette "A" in Exeter* (Fig. 45). Extremely close in size, clay, technique, and inscription to the Geneva piece above (No. 42) although somewhat cruder work. The only striking difference is the absence of the himation which makes it even closer to the Varvakion. An odd feature is a strip of drapery on the right side of the peplos: its rounded lower edge is decorated with an incised herringbone pattern, possibly a misinterpretation on the part of the statuette maker of the fold pattern on the open side of the peplos of the original statue which he did not know at first hand. Formerly in the Montague collection, recorded as "found on the Athenian Acropolis." Exeter Museum, inv. no. 5/1946/778. Unpublished. For information I am indebted to Prof. John Herington, then of Exeter University, who in his letter of March 15, 1960, also states that R. A. Higgins and Mrs. D. B. Thompson, who have seen the statuette, "are inclined to think that it is genuine."

45. *Statuette "B" in Exeter.* Reddish clay with white slip; scattered traces of red and (on crest of helmet) blue. Height, *c.* 0.18 m. Hollow; no vent hole but open underneath. Usual features: triple-crested hel-

met, upturned cheek-pieces, locks on shoulders, aegis with snakes, peplos with overfold, shield, and snake. Unusual features: a cuirass over the peplos with a gorgoneion in relief under the breast, right arm strongly bent at the elbow. No Nike on hand. Outside face of the shield bears an odd emblem which seems to be a misinterpretation by the statuette maker of a winged gorgoneion encircled by snakes. Also formerly in the Montague collection. Exeter Museum, inv. no. 5/1946/492. Declared "a probable forgery" by R. A. Higgins, but listed here because it may throw some light on Exeter "A" statuette whose importance lies in its reflecting the column under the Nike. For information I am indebted to Prof J. Herington as above.

46. *Statuette in Oxford* (Fig. 46). On high round base. Attitude and usual attributes of Athena Parthenos. The figure differs in that it is of slimmer proportions with a rather high-girt peplos and archaistically treated folds. It also differs in the angle of the shield whose exterior is turned more toward the spectator. Striking is a patera instead of the Nike in the right hand. Roman, probably from Syria. Gift of Sir Leonard Woolley. Ashmolean Museum, 1954.95.

47. *The Brommer statuette.* Height, 0.162 m. Traces of dark red paint on the shield. On high square base. As in No. 46, patera instead of Nike in right hand. Also similar is the angle of the shield. Horizontal edge of overfold more in accordance with the original than the preceding two examples. Bought recently on the Munich market by Prof. Frank Brommer to whom I am indebted for information and kind permission to list. Of unknown provenance.

48. *Statuette in Marburg* (Fig. 47). On high square base. Height 0.109 m for the figure; 0.023 m for the base. Light coloured, well levigated clay; front mould only, back added by hand. Hollow, no vent hole. No trace of painted decoration. Similar to the Oxford statuette (No. 46) in archaistic treatment of high-girt chiton, angle of the shield, patera in right hand, though cruder. Archaeological Seminar of Marburg University, inv. no. 894. Bought in Smyrna in 1914. For information and kind permission to publish I am indebted to Prof. H. Drerup and Dr. Adolf Borbein.

49. *Fragment of plaque from Athenian Agora* (Fig. 48). Dark buff clay, unglazed. Max. dimensions, 0.084 m. Athena's head in profile to left. The most interesting variant is the decoration of the cheek-piece which instead of a griffin rampant shows a striding male figure cradling a club in his left arm. Possibly part of a large lamp or a decorative medallion. Context and workmanship date it to third century A.D. Excavated in 1939. Agora Museum, Athens, L 3703. H. A. Thompson, *Hesperia* 17 (1948) 182, pl. LXII, 1; Becatti, pl. 63, fig. 185.

50. *Fragment of mould for a plaque from Athenian Agora* (Fig. 49). Estimated diameter, 0.24 m. Dark pinkish buff clay. Only helmet and shoulder of Athena remain. Same variant of the cheek-piece as No. 49. Interesting feature is the inscription round the rim: Η ΑΘΗΝ . . . Its large size suggests that it may have been used for manufacture of souvenir *oscilla* rather than lamps. Third century A.D. Excavated in 1947. Agora Museum, Athens, T 2367. H. A. Thompson, *Hesperia* 17 (1948) 182, pl. LXII, 2; Becatti, pl. 63, fig. 186; *Agora* VI, 84, No. 1114, pl. 32.

51. *Fragment of a miniature replica of the Parthenos shield* (Fig. 50). Estimated diameter, 0.15 m. Soft clay, ranging from buff to yellow and red. Several figures of the Amazonomachy from the bottom and lower right of the shield remain. Since there is no trace of an attachment it is uncertain whether the piece was an independent "objet d'art" or part of a terracotta statuette of Athena Parthenos. Third century A.D. Excavated in 1959. Agora Museum, Athens, T 3577. H. A. Thompson, *Hesperia* 28 (1959) 106-108, fig. 2, pl. 22 d; *Agora* VI, 84, No. 1115, fig. 7, pl. 32; Harrison, 115, pl. 37 b; 39 e; Strocka, 36-37.

52. *Medallion from the Athenian Agora* (Fig. 51). Diameter, 0.095 m. Buff clay with no trace of painted decoration. Athena's bust to right. The helmet with upturned cheek-pieces (whose design has been rubbed to illegibility) is a very good example of the Parthenos helmet: it is triple-crested with a sphinx in the middle and a pegasos to either side; animal protomai above the brow-band; a scroll design on the dome of the helmet, and a scale design on its neck-piece. The necklace consists of a string of round beads with pendants. The earrings are of the cluster type. The spear, resting on the left shoulder, seems to be supported by one of the aegis snakes. All this relates the medallion very closely to the Aspasios gem (No. 36) and offers valuable testimony for the type of head and face. The round shield in the background, however, is more appropriate to the Proma-

chos, and the medallion in that respect seems to be a contamination of the two types, as Prof. Thompson points out. The piece, moulded separately, was set into the bottom of a large bowl from which it was later broken out and roughly trimmed. Third century A.D. Excavated in 1957. Agora Museum, Athens, T 3519. H. A. Thompson, *Hesperia* 27 (1958) 159, pl. 46 d.

53. *Mould from Corinth* (Fig. 52). Height, 0.165 m; maximum width, 0.08 m; thickness, 0.035 m. Buff clay; oval shape. Almost perfectly preserved. Head and bust of Athena in full front view. Aegis, narrower than in most other copies (due to the shape of the mould), has a gorgoneion in the centre and snakes round the edges. Single necklace. Helmet with undecorated cheek-pieces has three crests carried by a large winged sphinx in the centre and two smaller pegasoi on either side. Due to the shape of the mould the latter are placed in profile instead of, as usually, parallel to the sphinx. Animal protomai from the brow-band of the helmet are omitted. The features approach the Varvakion type but are lighter and more attractive. Found in American excavations in Corinth in 1908. Corinth Museum. Dated to the Hellenistic period by Robinson, *AJA* 15 (1911) 482-495, figs. 1-3, and to the fifth or fourth century B.C. by Gladys R. Davidson-Weinberg, *Corinth,* XII, *The Minor Objects* (Princeton 1952) 62, No. 471, pl. 45.

54. *Mould from Smyrna.* Fragment of a large mould for a relief medallion. Height, 0.12 m. Head of Athena Parthenos in profile to left. Berlin, Antiquarium (in 1891). TC 8293. *AA* 7 (1892) 106, No. 19; W. Fröhner, *Terres Cuites de la Collection Gréau*, No. 1057.

55. *Relief plaque from Olynthus.* Height, 0.22 m. Red-buff clay. Hollow at the back. Right side and top missing. The suspension hole to the left of Athena's crest suggests that the plaque was used as an icon, parallel to later Christian usage. Rather crude work but unmistakably Athena Parthenos: the winged Nike on the outstretched right hand, the bent left leg, the Attic helmet with upturned cheek-pieces, the suggestion of a sphinx in the middle, are all typical details. A deviation is a snake on the right side under the Nike. Noteworthy are the folds of the peplos, V-shaped above the waist in front, the κόλπος, and the line of the overfold all of which very closely resemble Varvakion copy. Dated to the later part of the fifth century B.C. Robinson, *Olynthus* IV, No. 358, pl. 37.

56. *The Brommer head* (Fig. 53). Height, 0.045 m. The three-crested helmet (crests broken off) shows no other plastic decoration. Clumsy round cheek-pieces in front of the lateral crests. Large discoid earrings. The face bears a remarkable resemblance to the Lenormant copy (No. 1). Acquired on the New York market in 1958 where it came from a private collection in Hamburg. Said to be from Tarentum. In the collection of Prof. Frank Brommer, Mainz, to whom I am indebted for information and kind permission to publish.

57. *Medallion from the Athenian Agora* (Fig. 54). Diameter, 0.049 m; height of face, 0.017 m. Buff clay. A trial impression from a mould. Bust of Athena, facing, wearing triple-crested helmet with the sphinx and the pegasoi, and pendant earrings. Dotted (?) circle all around. Rather rough, with no trace of painted decoration. Roman period. Excavated in 1953. Agora Museum, Athens, T 3219.

58. *Medallion with the head of Athena* (Fig. 55). Diameter, 0.042 m; thickness, 0.005 m. Very fine pale clay with traces of gilding over a rather heavy flesh-coloured undercoating. The gilding seems to have covered all but the face which shows traces of white slip only. The head is turned slightly to its right. It is heavy, with a rounded chin. The pupil of the wide open eyes is indicated by a plastic dot. The triple-crested helmet with cheek-pieces sports a row of five animal protomai (horses?) consisting of heads and necks protruding above the brow-band. On the right cheek-piece, traces of an owl sitting on its edge. The triple necklace consists of a row of bud-like pendants and, above it, of two rows of round beads. The earrings are of the disc-and-pendant type. Below each ear, a small winged figure (Victory?) holding a fillet. The crests and the edges of cheek-pieces are dotted. A triple dotted edge all round. Broken and rejoined through the middle with a fragment missing from bottom edge. Embedded at centre back are remains of a very fine bronze wire loop for attachment. In many respects the medallion resembles the Hermitage gold medallions (No. 38). Of unknown provenance. Probably late fifth or early fourth century B.C. Royal Ontario Museum. Accession no. 962.263. Donated by Mr. F. Crane into whose collection it had come in the early 1960s with a group of chiefly Attic fifth century B.C. material.

59. *Two "buttons" in the National Museum, Copenhagen.* Diameter, 0.025-0.030 m. Parts of a gilded terracotta necklace consisting of heads and pendants

of other shapes (female heads, cluster of grapes, etc.), all of them strung on thin bronze wire. The head of Athena on the discoid pendants (or "buttons" as they have been called) is of the usual type appearing on many similar "buttons" (see below). N. Breitenstein, *Catalogue of the Terracottas in the Danish National Museum* (Copenhagen 1941) No. 569, pl. 71.

60. *Two "buttons" in the Saloniki Museum.* Diameter, *c.* 0.025 m. Head of Athena Parthenos, frontal. Probably parts of imitation jewellery as the preceding. Found with funeral gold wreaths and other jewellery in the early Hellenistic tombs at Derveni of the second half of the fourth century B.C. Very similar are seven gilded terracotta "buttons" with imbedded wire at the back, found in a tomb of the last quarter of the fourth century B.C. at Sedes near Saloniki, showing a frontal head of the Parthenos. *ArchEph* 1937 (3) 892-893, fig. 28 (illustrating also other "buttons" from the tomb, decorated with gorgon's heads, rosettes, etc).

61. *"Button" from Keos* (Fig. 56 a, b). Diameter, 0.02 m. Head of Athena Parthenos, turned slightly to her left. Two winged Victories (?) hold her earrings. An owl perches on her left cheek-piece. Bronze wire loop imbedded at centre back. From University of Cincinnati excavations in Keos, Ayia Irini, in 1961. Inv. Kl.80. Found in a deposit near the surface, probably from a shrine, with some fourth century B.C. objects. *Hesperia* 31 (1962) 282, pl. 102 k; *Archaeology* (Winter, 1962) 226, fig. 10. Extremely close to *BMCat Jewellery*, No. 2147 (of unrecorded provenance).

Other discs or "buttons", similar to these, are in the British Museum, *BMCat Jewellery,* Nos. 2134-2143, mostly from Cyrenaica, and Nos. 2147-2149. Some are in the Allard Pierson Museum in Amsterdam, and some in the Louvre, Cf. also Robinson, *AJA* 15 (1911) 502-3. Mould-pressed and usually with traces of gilding, they are terracotta imitations of gold jewellery dating generally from the fourth and the third centuries B.C. Practically all of them have traces of bronze wire at the back or below, obviously for attachment of something or to something (clothing?). They vary in size, and No. 58 with a diameter of 0.042 m is the largest of those listed (and the largest known to me so far). The large number of those with the head of Athena Parthenos shows the great popularity of the statue throughout the Greek world of the later Classical and the Hellenistic periods.

POTTERY

62. Some terracotta medallions with the head of Athena Parthenos, similar to the preceding discs, were used as *appliqué* to vases, as suggested by their concave shape. *BMCat Jewellery*, No. 2140.

63. *Megarian bowl in the Royal Ontario Museum* (Fig. 57 a). Height of bowl, 0.052 m; diameter, 0.105 m; diameter of medallion, 0.02 m. Hemispherical shallowish bowl with markedly flaring mouth; thin brownish-red glaze inside and out; of distinctly non-Attic manufacture. Head of Athena Parthenos in the medallion on bottom exterior: frontal, with triple-crested helmet, disc earrings, and necklace of beads; side locks. Said to have come from Cività Castellana. About second century B.C. Royal Ontario Museum. Accession no. 919.5.52. Robinson-Harcum, No. 613, pl. 96.

64. *Megarian bowls from the Agora in Athens* (Fig. 57 b). A number have the bust of the Parthenos in the bottom medallion (P 26235, 12054, 18651). Remarkable are P 18662 (illustrated) and P 18663 some of whose decorative elements (imbricate small leaves, larger leaves, comic masks, the head of the Parthenos in the bottom medallion) are identical with those on the preceding Royal Ontario Museum bowl (No. 63). They date from 225-200 B.C. Hesperia 29 (1960) 283, C-20. More of the similar bowls, E. Langlotz, *Die antiken Vasen von der Akropolis zu Athen* (Berlin 1925-33) II, pl. 90, *1255, 1263*; *Hesperia*, Suppl. x, pl. 47, *88*; 48; *100*, *101*; *AJA* 45 (1941) pl. VI A, 11; X A, 1-4.

65. *Medallion from a guttus.* Diameter, 0.054 m. Good black glaze over light yellow clay. The head of the Parthenos closely resembles that on the Hermitage medallions (No. 38) which it follows also in the wiry treatment of the side locks and in the detail of the spear being supported by an aegis snake on the shoulder. Also, as on the gold medallions, the lower edge of the helmet in front is straight (in most other copies it is pointed toward the root of the nose). The mould for the medallion was probably taken from a metal emblem decorating a metal vessel. Greek, probably Attic, first half of the third century B.C. In the collection of Dr. Paul Arndt in Munich in 1908. R. Pagenstecher, "Zur Athena Parthenos des Phidias," *AthMitt* 33 (1908) 113-134.

66. *Fragment of mould of central medallion from a Calenian bowl.* Height, 0.127 m. Head of Athena in relief, slightly to her left. The hair falls in locks on

each shoulder. Triple-crested helmet with a sphinx in the centre and pegasoi at the sides, griffins on upturned cheek-pieces. About eleven animal protomai above the brow-band of the helmet the lower edge of which is straight. Disc-and-pendant earrings, double necklace. A rearing aegis snake on the left shoulder supports the spear. All within a triple beaded border. From Calvi (Cales). Mid third-second century B.C. British Museum. Formerly in the Castellani collection. *BMCat Terracottas*, E 72; R. Pagenstecher, "Die Calenische Reliefkeramik," *JdI Ergänzungsheft* 8, 23, No. 5a, fig. 6.

67. *Medallion from a Calenian guttus.* Head of Athena, frontal. Round face; crested helmet with brow-band pointing toward nose. No spear, and no animal protomai on the helmet, but sphinx and pegasoi can be recognized. Aegis below multiple necklace. Munich, Glyptothek (Arndt Collection). Pagenstecher, *op. cit.*, 91, No. 165, pl. 21. For several other medallions from gutti with the head of the Parthenos type, *ibid.*, Nos. 166 a and b, pl. 21; No. 169, p. 92, fig. 41.

BRONZES

68. *Small head from Carnuntum.* Height, 0.07 m. Very well preserved. Thin and clean cast, finely tooled. The scroll ornament of the brow-band, eyebrows, eyes, and lip are silver inlaid. The sphinx and pegasoi of the helmet are preserved, the crests are missing. Some details are simplified (hair, cheek-pieces), or omitted (animal protomai), but it is a fine work, probably made to be inserted in a herm of some other material. Found in 1903 on the site of the ancient Roman fort at Carnuntum. R. V. Schneider, "Athena Parthenos aus Carnuntum," *JOAI* 7 (1904) 151, pl. 1, fig. 69; R. Fleischer, *Die römischen Bronzen aus Österreich* (1967) No. 26.

69. *Statuette in Turin* (Fig. 58). Height, 0.66 m. Very well preserved. The round base is ancient. No accessories. Elegant work, graceful and accurate in pose. The high-girt chiton and the treatment of the folds are deviations of the Hellenistic or Roman copyist. Found in a river bed near Stradella in Italy in 1828. C. Carducci, *Il Museo di Antichità di Torino* (Turin 1959) 41, fig. on p. 66. Other bibliography for which I am indebted to Dott. Carducci, *GBA* 7, 209; Michaelis, *Der Parthenon,* 279; Heydemann, *Mittheilungen aus der Antikensammlungen in Ober und Mittel-Italien*, 42, no. 34; Dütschke, *Antike Bildwerke in Oberitalien*, IV, 109, no. 296; Barocelli, *Il R. Museo di Antichità di Torino*, 14, fig. 36.

Several bronzes in the British Museum are reminiscent of the Parthenos but add little of importance to the study of the original; cf. *BMCat Bronzes*, Nos. 1035, 1051. For the latter also A. S. Murray, *Greek Bronzes* (London 1898) 55, fig. 22.

NOTES

1. For the purpose of our study we have for the most part depended on the collection of ancient literary sources in Overbeck, Nos. 627-632, 645-690.
2. Clemens Alexandrinus, *Protrepticus* IV (p. 41 ed. Potter); Schol. Demosthenes *Contra Androtion* 13, p. 597 (ed. Reiske); Isocrates, *On the Antidosis* 2; Pollux, *Onomasticon* 7.92; Valerius Maximus 8.14.6 (Overbeck 652, 646, 651, 666, 670).
3. Translation by Frazer, *Pausanias*, I, 35.
4. Translation by B. Perrin, Loeb Classical Library, 1932.
5. Plutarch, *Pericles* 31; Schol. Aristoph. *Pax* 605; Dio Chrysostomus, *Orationes* 12.6 p. 373 (Overbeck 630, 629, 668). The sources give several contradictory accounts of the last years of Phidias' life. For a concise interpretation of the sources on this point, Harrison, 107-112.
6. *IG* I^3, 232-292; II^2, 1370-1492. Inscriptions concerning Athena Parthenos have been discussed by B. D. Merritt, *Athenian Financial Documents of the 5th century* ("University of Michigan Studies" 27, 1932) 30-41; M. N. Tod, *A Selection of Greek Historical Inscriptions* (Oxford 1933) 99, No. 47; W. S. Ferguson, *The Treasurers of Athena* (Cambridge, Mass. 1932) 46 ff; 119, n. 1; A. M. Woodward, "Attic Building Records," *BSA* 16 (1909-10) 187 ff; W. B. Dinsmoor, "Attic Building Accounts I," *AJA* 17 (1913) 53-80. Important older study is by U. Koehler, "Beiträge zur Periegese der Akropolis von Athen. I. Die Parthenos und der Parthenon." *AthMitt* 5 (1880) 89-101.
7. For ancient copying technique cf. Richter, *Sc. & Sc.*, 140 ff; *id.*, *Portraits*, 24 ff; *id.*, *AJA* 65 (1961) 210; DarSag, *s.v. STATUARIA*, 1138-1139.
8. Furtwängler, *Masterpieces*, 3.
9. E. Langlotz, *Phidiasprobleme* (Frankfurt /M 1947) 11.
10. One of the most useful early lists of marble copies is by Schreiber, 543-642, illustrated with detailed drawings and photographs, though naturally it does not include many of the important marble pieces discovered later. Other early lists are by K. Lange, *AthMitt* 6 (1881) 59-61; Frazer, *Pausanias*, II, 312-320; Puchstein, *JdI* 5 (1890) 83, n. 16; L. Pollak, *JOAI* 4 (1901) 146; R. Pagenstecher, *AthMitt* 33 (1908) 128; Loeschcke, *Festschrift* (a valuable list of heads); D. M. Robinson, *AJA* 15 (1911) 499-503 (a comprehensive list of statues, heads, and reliefs in marble, as well as of copies in minor arts, such as gems, bronze and silver coins, tesserae, jewellery, terracottas, and ceramics); Vannoy, 54-55; Collignon, 191-201.

    An important analysis of the copies in more recent times was given by J. Peschka, "Zur statuarischen Ueberlieferung der Athena Parthenos," Diss. Univ. Prague; it has to my knowledge never been printed in its entirety, but a very useful summary has appeared in *Jahrbuch*

der Philosophischen Fakultät der deutschen Universität in Prag (1927-28) 25-27. Most recent lists are by Dorothy K. Hill, *ArtB* (1936) 153-4, n. 8; D. Mustilli, *Il Museo Mussolini* (Rome 1939) 113-114; and Lacroix, 271-281.

11. The Varvakion statuette, which "gives us the closest and the most complete idea" of the original (Becatti, 109), is commonly taken as a standard against which all the other copies are measured. For this reason it has here been given a rather detailed description. The quoted parts are from Frazer, *Pausanias*, II, 313.
12. In connection with the copies of the head of Athena Parthenos a group of heads of Athena should be mentioned. They are (all of them marble):
    1. *a head in the Museo Nazionale Romano*, the so-called Carpegna head, Amelung, "Athena des Phidias," *JOAI* 11 (1908) 169-211, figs. 58-61; Helbig[4], No. 2263; 2. *a head in the Vatican*, Amelung, *op. cit.*, fig. 63; Helbig[4], No. 331; 3. *a head in Vienna*, Amelung, *op. cit.*, fig. 62, pls. V, VI; 4. *a head in Dresden*, *AA* 13 (1898) 53-54; 5. *a head in Athens*, *JdI* 14 (1899) 143; 6. *a head in London*, *Ancient Marbles in the British Museum* I, pl; Amelung, *op. cit.*, figs. 65-67; 7. *a head in the Museo Barracco*, Rome, Helbig[4], No. 1873; S. Reinach, *Têtes Antiques* (Paris 1903) 72-74, fig. 11, pl. 90; 8. *a head in Oberlin*, Ohio, *Allen Memorial Art Museum Bulletin* 10 (1953) 76-89. All of these heads were executed in a very similar technique in which the eyeball was inlaid in a different material (ivory, alabaster, or finer white marble) with an iris in precious stone or glass paste, with the eyelashes inserted from a clipped strip of metal. In some (Dresden, Athens) the highly polished face was given a coat of wax and colour. The helmet, probably from a different material, was in almost all cases mounted separately by means of a special dowel arrangement. In some of them the hair as well was separately attached. The ears are usually pierced for earrings. Since along with some of these heads (Vienna, Vatican) feet and arms were also found, not broken off but made to be inserted, it can be assumed that they belonged to acrolithic statues of Athena of which the torso was made of some other, more perishable, material, probably wood or stucco covered with gold leaf. Their prototype is believed not to be Athena Parthenos but another chryselephantine statue of Athena, probably slightly earlier than the Parthenos. They are mentioned here because the technical execution of their details gives us valuable suggestions for the appearance and the construction of the Parthenos. Indeed, the same construction of the eye of the Parthenos is described by Plato, *Hippias Major* p. 290 B (Overbeck 653). Copies in minor arts, showing earrings, indicate that the ivory ears were pierced. The helmet was probably similarly mounted.
13. Marble copies of the whole shield and of the individual copies are also listed by Bothmer, *Amazons*, 210-211; Bielefeld, 18-19. Most recently and in great detail, Strocka.
14. Margaret Thompson, *The New Style Silver Coinage of Athens* (New York 1961) 32.

II. General Considerations

A. BRIEF HISTORY OF THE STUDY

Our knowledge of the colossal gold and ivory statue of Athena Parthenos, made by Phidias for the Parthenon in Athens, derives, as we have seen, from two sources, the literary and the archaeological. Until some hundred years or so ago the literary evidence, provided by Greek and Roman writers and by inscriptions from the Acropolis, supplied the main information about the statue which, like other gold and ivory (chryselephantine) statues in antiquity, has not come down to us. The discovery of the Lenormant statuette (No. 1) in 1859 supplied one of the earliest archaeological testimonia; at any rate it was the first recognized copy in the round. Since then scores of monuments copying or, more accurately, reflecting the statue have been found or recognized, increasing considerably the archaeological evidence.

The interest and the fascination the famous cult statue held for its contemporaries is hardly less now, twenty-four centuries later. From the middle of the nineteenth century to the present day classical archaeologists have attempted to determine the appearance of the original statue. Their studies have agreed on essential features of the image but have left many of its important details uncertain. This is due, on the one hand, to the fact that the information provided by the texts is often superficial or obscure, and on the other, to the varying degree of accuracy with which the ancient copyists reproduced the famous original. In many cases the uncertainty is increased by the bad state of preservation in which both the literary and the archaeological evidence have reached us, and it is unlikely that final answers to many of the problems surrounding the statue will ever be found, although through new discoveries and new studies we may come closer to them.

It is probably correct to say that, more vividly than in any other way, the appearance of the original can be suggested by a three-dimensional model combining all the details supplied by the available evidence. The first such model of the Parthenos was made in 1855 by the French sculptor Simart for the Duke de Luynes in Paris, and was exhibited in the Palais des Beaux Arts[1] (Fig. 59). Although grand in size and materials (the nine-foot-high statue boasted real ivory, gilded silver, and gilded bronze) it was, of necessity, based almost exclusively on the literary evidence. It consequently could not help deviating in details, particularly in the accessories, from the original as it has since revealed itself through the accumulated archaeological evidence.

Our model is, to the best of my knowledge, the only other three-dimensional model ever made. It is based on a detailed study of the evidence, and on the voluminous modern bibliography on the subject. Executed, from the basic modelling to the many fine details, with masterly skill by Miss Sylvia Hahn, it has been set up in the cella of the temple, both reconstructed on an approximate scale of 1:10.

Finished in gold and ivory (ivory paint and gold leaf), and lit so as to simulate the light falling on the statue from the east entrance of the temple (as would have been the case in real life) the model, with two human figures standing at the side to illustrate the scale, conveys—with some adequacy, we hope— the impression the gold and ivory colossus produced on those who visited the temple in antiquity. We are only too well aware that no modern hand can recapture the genius of Phidias (that ability eluded even the ancient copyist), and that what we are able to offer is hardly more than a detailed stocktaking of the statue. We are also conscious of the fact that like all modern restorations of ancient things the model necessarily reflects the scholarship and the taste of our own time and that, as new discoveries and new research is added, it will no doubt be modified and superseded (Fig. 60).

B. PURPOSE AND HISTORY OF THE STATUE

The gold and ivory image of Athena on the Acropolis was erected in the greatest period of Athenian history when the city was still animated by the enthusiasm and confidence resulting from the victories over the Persians for which she had been in large measure responsible. Although the statue of the Goddess-Protectress was a splendid votive offering rather than a cult image—the cult image was the wooden *xoanon* that had stood in the Old Temple and was later transferred to the Erechtheum[2]—to the people of Athens she was a symbol of their achievements and prosperity, and of their political strength. Called simply τὸ ἄγαλμα or τὸ χρυσοῦν ἄγαλμα (the golden statue) in the public inscriptions of the fifth and fourth century B.C., she became known as the Parthenos, "the Maiden," only much later in antiquity. She and her temple, also simply "the temple" in the beginning, were built with funds from the Treasury of the Delian League after it was transferred to Athens. Pericles thought it justifiable to draw on the contributions of other Greek cities in the League to rebuild and beautify the city of Athens

ruined by the Persian occupation. The gold reserves were turned into works of art but Pericles declared at the beginning of the Peloponnesian War (Thuc. 2.13.4) that in case of extreme necessity the gold offerings and the furnishings of the temples could be used as gold bullion; even the removable gold plating from the statue of the Goddess itself could be melted down, though with the proviso that it should be later replaced. And we know indeed that in the dark days of the war all but one of the golden Nikai of the Acropolis did go into the melting pot.[3] But the statue of Athena remained reverently intact—as proved by the temple inventories of the fifth century—and it was not until 295 B.C. that its gold was stripped by the tyrant Lachares.[4]

Several ancient literary references concern the later fate of the statue. From a passage in Zosimus, a Greek historian who lived in the first half of the fifth century A.D. under Theodosius II,[5] it is obvious that the statue was still in cult use in the last quarter of the fourth century A.D. It appears that it stood on the Acropolis until the latter half of the fifth century when the philosopher Proclus saw it removed, as reported by Marinus.[6] It is not certain however that the ivory Athena, mentioned by another source as standing in the forum of Constantine in Constantinople about the beginning of the tenth century A.D.,[7] was the gold and ivory statue from the Parthenon. Like the rest of the numerous ancient chryselephantine statues Athena Parthenos did not survive late antiquity and it must have perished early in the turbulent times of the Christian Middle Ages.

Interesting for the history of the statue is the "story of five dowels," as interpreted by W. B. Dinsmoor.[8] He was the first to call attention to a type of dowel cutting in the pavement under the base of the statue which is later that the period of the original construction. It is evident from these dowel cuttings that the outside blocks of the bottom course of the base were replaced at some later date. This necessity must have arisen after a fire which damaged not only the base and, most probably, the statue, but also other parts of the temple, as judged by the traces on the whole pavement of the east cella, on the east door, and on the columns of the pronaos. The restored plinth was set back 0.19 m on all sides. If the sculptured frieze of the base was restored as well, the figures must have been recut in a lower relief on account of a narrower plinth, according to the calculations of G. P. Stevens.[9] Traces show that the shallow water basin in front of the statue was adjusted to the restored pedestal, implying that there still was a statue—the original or a replica—which needed humidity for its ivory.[10] Judging by the technique of the peculiar dowel cuttings with pour channels in the restored base Stevens dates the fire and the restoration to the Roman period.[11]

The question whether only a repair took place after the fire, or a complete reconstruction of the original was necessary, is a difficult one to answer. Dinsmoor assumes that the gold, stripped off by Lachares in 295 B.C., was not restored until at least a hundred years later after Athens' political and economic situation had improved.[12] In the meantime the 44 talents of gold (at about 57 lb. per talent this totalled about 2508 lb.), used for the original statue, might have been replaced by gold leaf, one-fiftieth of a talent of which would have sufficed to resurface the "denuded" parts.[13] The great fire, however, which swept the temple and caused a subsequent restoration of the base, is attributed by Dinsmoor to a period sometime soon after 200 B.C.: to him the dowels in question suggest Pergamene work of the second century B.C. Consequently, he says, the copies of the Parthenos reproduce not the original statue by Phidias "but a Hellenistic and therefore more or less inaccurate replica." This replica, he says further, was based on the early copies of the statue, executed mainly in minor arts, such as the Hermitage gold medallions of the fourth century B.C. (No. 38, Fig. 42); the coins of Thurioi of the end of the fifth century B.C.; the coins of Side in Pamphylia of about 400 B.C. and of Aphrodisias (or Nagidus) in Cilicia of about 375 B.C. (Fig. 40), the latter two showing a copy not of the Parthenos but of the local cult statues made on the model of the Parthenos; the "new style" Athenian tetradrachms (Fig. 39); and on the early marble copies comprising about two dozen Athenian reliefs of the fourth century (particularly No. 35, Fig. 37); and on the statue from the Acropolis (No. 17, Fig. 11).[14] Early copies such as these, Dinsmoor thinks, could have given the Hellenistic rebuilders enough information to execute a replica. Another significant coincidence is, he maintains, that many other copies were made in this period due to the stimulus caused by the making of the new replica for the Parthenon. Among these are the rather free copy from Pergamon (No. 21, Fig. 15); a similar one from Notion of which only fragments remain (No. 23); the gold and marble cult statue from Priene (No. 22); coins from Cappadocia, Syria, and Crete.[15] The particular interest in the statue of Athena Parthenos prevalent in Asia Minor during the Hellenistic period is attributed by Dinsmoor to the fact that the rulers of the eastern regions were friendly to Athens during this period; indeed many

of them were made honorary citizens of the city. Since they are known to have built various buildings and monuments in Athens, such as the Stoa of Eumenes and the Stoa of Attalos, they may well have reconstructed the interior of the Parthenon and replaced the Phidian statue both of which according to Dinsmoor were damaged by fire shortly before 165 B.C. Going even further Dinsmoor suggests the sculptor Damophon of Messene as the author of the Hellenistic replica, for we know from Pausanias (4. 31. 6) that Damophon was the one who was entrusted with the repair of the gold and ivory image of Zeus made by Phidias for the temple at Olympia.[16] Damophon's career can be placed in the first half of the second century B.C. and it would thus coincide with Dinsmoor's date of the fire in the Parthenon and the destruction of the statue.

Koch[17] and Goethert[18] disagree with Dinsmoor's hypothesis of such an early fire and a complete restoration of the statue based on the evidence of the "five dowels." The "new style" Athenian coins with the head of the Parthenos the beginning of which they dated to 229 B.C.[19] show the same Phidian type in an unbroken line to the time of Augustus, and the Hellenistic replica seems to have left no impression upon the die-cutters. The Neo-Attic reliefs from the Piraeus with scenes from the shield show a common original of the Phidian style. It is hard to believe that they were copied from a replica the builder of which did not see the Phidian original. Moreover, they declare, it can not be proved that the other repairs of the temple, necessitated by the fire, were done at such an early date, and there is no mention in literary sources of a great conflagration or of any basic changes in the Hellenistic period. There is no proof that the dowel holes are Pergamene; they may be Roman, as also believed by Stevens, or even Byzantine.

To these objections we can add that the early "free copies and reflections of the statue in minor works of art,"[20] and the Athenian marble reliefs of the fourth century B.C., mentioned by Dinsmoor, could not have provided enough detailed information on which a Hellenistic replica of a Phidian original, so rich in detail, could have been based. It is quite clear that the copies from the first two centuries of the Roman Empire derive from a common prototype in the Phidian tradition. Hellenistic copies, such as those from Pergamon, Notion, and Priene, which according to Dinsmoor were erected after the great fire and the subsequent reconstruction of the original in the second century B.C., are all, in the typical Hellenistic spirit, very free adaptations of the original. Roman copies, on the other hand, show none of these Hellenistic influences: they all reflect not only the stylistic features of the classical period, but they also present many identical details, such as the folds of the peplos, and the arrangement of the hair in front and back. These Roman copies could not, in my opinion, be copies of a Hellenistic replica produced merely on the evidence of the early "free copies and reflections of the statue in minor works of art" and the very sketchy Athenian marble reliefs, and consequently exhibiting many features characteristic of the contemporary Hellenistic sculptural style, because the Roman copies both of the entire statue and of its decorative reliefs show pedantic and often painstaking efforts on the part of the copyist to follow the original Phidian statue.

If, in agreement with G. P. Stevens, one presumes the fire to have occurred in Roman times, perhaps in the later second or third century A.D., then it is probable that the statue was reconstructed at that time. Whether this was a complete reconstruction, or only a partial restoration, it is difficult to say, but it should be safe to assume that the copies preserved to us are not of a Hellenistic replica of a Phidian original supposedly completely lost in a fire in the first half of the second century B.C.

C. TECHNIQUE AND MATERIALS

Before we turn to an analysis of the original statue and its various details a few words should be said about the materials of which it was made.[21] We know from the literary sources that gold and ivory were used, but the information on the distribution of these materials is scanty. It is certain that ivory was used for the face and the neck, both arms, and what was visible of the feet, as well as for the gorgoneion of the aegis.[22] The gold, weighing 44 talents, was used for the drapery, and it was attached in such a way that it could all be removed.[23] The snakes of the aegis were perhaps also of gold,[24] but there is no information on other details, such as the hair of the statue, the serpent, the spear, the shield, the Nike, the aegis, and the reliefs of the base.[25] The gorgoneion of the shield was of gilded silver.[26]

According to the latest calculations by von Gerkan it is obvious that many details of the statue and most of the accessories must have been made of some material other than gold.[27] The 44 talents or 1120.24 kg of gold, if used only to cover the drapery of a statue about 10 m high, together with the life-size statue of the Nike, would make the plates not thicker than 0.57 mm. This, although rather thin, would

still allow the plates to be handled without bending, an important consideration in view of the fact that the gold of the statue formed part of the State Treasury and was inventoried regularly every four years.[28] The armour of the goddess, the serpent and other accessories would so enlarge the surface to be covered that the plates would have to be reduced to a thickness of only 0.40 mm, which would make them too thin and quite impracticable. This agrees with Dinsmoor's view whose own estimate of 0.77 mm for the removable gold plates does not include "the helmet, shield, serpent, pedestal reliefs, etc., which were undoubtedly of other materials."[29] We are probably quite justified in assuming that these were made of gilded bronze.

Although there is no exact report in the sources how the chryselephantine statues were made, an amusing "behind the scene" description comes from Lucian, a second century A.D. writer and rhetor whose comments on art are invaluable. Gold and ivory statues, he says, look extremely well from the outside. "But take a peep inside, and what have we? One tangle of bars, bolts, nails, planks, wedges, with pitch and mortar and everything that is unsightly, not to mention a possible colony of rats and mice."[30] The most costly of the Greek statues "are only ivory with just an occasional gleam of gold, the merest surface plating; and even those are wood inside, harbouring whole colonies of mice."[31]

Another interesting detail concerning the technical aspect of gold and ivory statues is provided by Pausanias who says that round about the black pavement in front of the image of Zeus at Olympia, the other great chryselephantine statue made by Phidias, "runs a raised edge of Parian marble to keep in the olive oil which is poured out. For oil is good for the image at Olympia, and it is this that keeps the ivory from suffering through the marshy situation of the Altis. But on the Acropolis at Athens it is not oil, but water, that is good for the ivory in the image of the Virgin. For the Acropolis being dry, by reason of its great height, the ivory image needs water and moisture. At Epidaurus, when I asked why they poured neither water nor oil on the image of Aesculapius, the attendants of the sanctuary told me that the image and throne of the god were erected over a well."[32]

From this passage it is obvious that special care was taken for preservation of gold and ivory statues which were particularly subject to damage through excessive dryness of the air. To counteract it a large shallow pool was kept filled with water in front of the statue on the Acropolis, and similarly at Epidaurus the image of Aesculapius was kept humidified, this time apparently by a natural well over which it was erected. Not entirely clear in this connection is Pausanias' reference to the image of Zeus at Olympia where, he says, olive oil is kept within a shallow pool in the pavement in front of the image to keep "the ivory from suffering through the marshy situation of the Altis." How olive oil, even if it could evaporate, could preserve the ivory from dampness is difficult to understand. It has been suggested that the "explanation" was probably invented by the local "cicerone" who knew of a similar pool in front of Athena in the Parthenon.[33] The simple reason for its existence in front of Zeus may have been to use it as a reflecting pool for which Phidias was inspired by the Parthenos where the pool could not help but serve a secondary purpose as well, that of reflecting the image. In the precinct at Olympia, which had a surplus of moisture, oil instead of water was used to achieve a reflecting surface yet avoiding additional humidity. This theory is supported by the fact that the floor in front of the image was paved with black, not white, stone which must have resulted in a truly mirror-like effect (Paus. 5.11.5).

One of the most discussed questions in recent years has been the method by which the gold plates were attached to the core of the statue. Was the surface under the gold plates completely finished? Was it wood or some other material? What was the arrangement for an easy removal and remounting of the gold plates?

It is generally assumed that the statue had a finished wooden core, which was then surfaced with a thin veneer of ivory and gold plating.[34] Some have thought that wood would have been unsuitable because of its expansion and contraction which would weaken and eventually damage the surface layers of gold and ivory.[35] The answer to this, of course, is that the water basin in front of the statue was installed there for this very purpose, that is to keep the atmosphere constantly and evenly humid and thus prevent the desiccation of the wood and ivory and possible subsequent damage.

The excavators of the workshop of Phidias at Olympia believe that, as a first step, a model was constructed for the gold and ivory statues. Though on a much smaller scale, perhaps only life-size, it gave the proportions for the colossal statue and served as a constant reference in the course of work. At Olympia, where the main work on the statue of Zeus was done in the workshop, the huge wooden core was made so that individual wooden blocks could easily be taken apart for transport and re-

assembled in the cella of the temple. Set up there, the framework was braced, somewhat like the hull of a boat, by an inner system of ribs.[36] The view that the wooden core was not solid and that the gold and ivory statues had more or less hollow interiors is corroborated by Lucian's comments, quoted above, on their "unsightly" interiors hiding a complex armature and sometimes even a colony of rodents.

In Athens we know that the core was constructed around a central wooden backbone whose socket is preserved in the floor of the temple. Stevens reckons the individual blocks to have been of an easily manageable size of about 0.50 m square, with a thickness of about 0.30 m. Sheets of gold could be shaped directly over the wooden core, and then attached to it.[37] The most probable method of attachment was by means of grooves cut into the core. This method is suggested by a bronze head of Nike of the late fifth century B.C., found in the Agora,[38] and by the "Lion Pedestal" from Persepolis.[39] In both cases the bronze core shows narrow, slightly undercut grooves, into which the edges of the gold or silver plates could be inserted. In the case of the Parthenos the grooves would be cut in the wood, but they may have been lined with bronze strips for better preservation. An alternative suggestion by Stevens is that the wooden core was covered with perfectly finished cast bronze plates to which in turn the gold sheets were attached by means of grooves. It is quite possible that this method was used in spite of its costliness, because it certainly would guarantee for as long a time as possible the preservation of the cult image from natural forces of deterioration.[40]

From the remains of paint, and the various colour effects attained through the inlay technique, such as can be seen on some of the copies of the Parthenos (the Berlin head, the Varvakion statuette, the Carnuntum bronze), and on some other copies of a very close contemporary statue of Athena (the Carpegna head, and heads in the Vatican, Vienna, British Museum, Dresden, Athens),[41] it is quite certain that the original statue was not merely bichromatic but rather polychromatic, the polychromy being achieved through painting and inlaying,[42] and, quite possibly, through variations in the alloying and the finishing of the gold.

NOTES

1. E. Beule, "La Statuaire d'Or et d'Ivoire—La Minerve de M. Simart," *Revue de Deux Mondes* (Feb. 1, 1856) 564-586; V. Duruy, *History of Greece* (English ed. London 1892) III, Section I, p. XII; illustration frontispiece vol. III, Section II.
2. The religious meaning of the Phidian Parthenos has been discussed by W. Dörpfeld, *AthMitt* 12 (1887) 190 ff; Ch. Picard, *Manuel* II, 380; and most recently and fully by C. J. Herington, *Athena Parthenos and Athena Polias—A Study in the Religion of Periclean Athens* (Manchester 1955); reviewed by E. B. Harrison, *AJA* 61 (1957) 208.
3. *IG* II², 1371, note; W. S. Ferguson, *The Treasurers of Athena* (Cambridge, Mass. 1932) 89, 122, n. 2; also P. Foucart, *BCH* 11 (1888) 283-293; D. B. Thompson "The Golden Nikai Reconsidered," *Hesperia* 13 (1944) 173 ff.
4. *IG* II², 1407, note 5; Athenaeus 9, p. 407 F (Overbeck 686); Ferguson, *op. cit.*, 85-86; for dating, E. T. Newell, *The Coinages of Demetrius Poliorcetes* (London 1927) 133 f, n. 4.
5. *Hist. nova* 4.18 (Overbeck 688).
6. *Vita Procli* 30.
7. Schol. Aristid. *Orat.* 50 (Overbeck 690).
8. W. B. Dinsmoor, "The Repair of the Athena Parthenos: a story of five dowels," *AJA* 38 (1934) 93-106.
9. *Hesperia* 24 (1955) 272, fig. 19.
10. Paus. 5.11.5.
11. *Hesperia* 24 (1955) 276; 30 (1961) 7.
12. See n. 8.
13. The weight of the gold used for the statue is given by Thucydides (2.13) as 40 talents (Overbeck 655), and Diodoros Siculus (12.40) as 50 talents (Overbeck 657). Dinsmoor, *op. cit.*, 96, n. 2, prefers to give credence to Philochorus (Schol. Aristophanes *Pax* 605, Overbeck 647) who gives 44 talents, quoting probably directly from the inscriptions and the archives on the Acropolis. Gerkan, 55-58, agrees that 44 talents were probably used after the original 40 talents were alloyed with some other metal for hardness; the nature of the alloy of course affects the strength of the gold and the necessary thickness of the gold plating.
14. For the coins of Thurioi cf. *Grose* I, pls. 39-43; for the coins of Side in Pamphylia, *BMCat Lycia and Pamphylia*, pl. XXVI, 4-11. For a list of the Attic reliefs Robinson, *AJA* 15 (1911) 501.
15. *BMCat Coins Galatia and Cappadocia*, pl. VI, 2-4, 6-9; pl. VII, 2-11; *BMCat Coins Seleucid Kings*, pl. XV, 5; XVI, 12, 15; XVII, 10; XVIII, 12; XX, 6; XXII, 4; XXIV, 2, 9; XXV, 12; XXVI, 8; for the coin from Gortyn, B. V. Head, *Historia Numorum* (Oxford 1911) 467.
16. W. B. Dinsmoor, "An Archaeological Earthquake at Olympia," *AJA* 45 (1941) 423 ff.
17. "Zur Spätgeschichte der Parthenos," *AA* 1935, 388-394, where Dinsmoor's theory, based on the "story of five dowels" is called a "hübsch ausgedachtes Märchen."
18. *JdI* 49 (1934) 157-161.
19. Margaret Thompson's revised dating of the New Style issues, placing their beginning early in the second century B.C. (196/5 B.C.) does not invalidate this argument. M. Thompson, *The New Style Silver Coinage of Athens* ("Numismatic Studies" 10, New York 1961) 32.
20. W. B. Dinsmoor, *AJA* 38 (1934) 103. The copies in minor works of art, referred to by him, are the already mentioned Hermitage medallions (No. 38), the coins of Thurioi in Italy, the coins of Side and Aphrodisias (see n. 14).
21. The technique of the Parthenos and other chryselephan-

tine statues has been discussed DarSag, *s.v. EBUR*, 446; P. Amandry, "Les statues chryselephantines de Delphes," *BCH* 53 (1939) 86 ff; 54 (1940) 271; D. B. Thompson, "The Golden Nikai Reconsidered," *Hesperia* 13 (1944) 173-209; Dinsmoor, *AAG*[3], 178; M. S. F. Hood, *JHS* 75 (1955) Suppl., p. 11; *AJA* 60 (1956) 271, pl. 97, fig. 2; Stevens, "How the Parthenos was made," *Hesperia* 26 (1957) 350-361; Gerkan; E. Kunze, *Gnomon* 27 (1955) 220 ff; *id.*, "Olympia," *Neue Deutsche Ausgrabungen im Mittelmeergebiet und im Vorderen Orient* (1959) 277 ff.

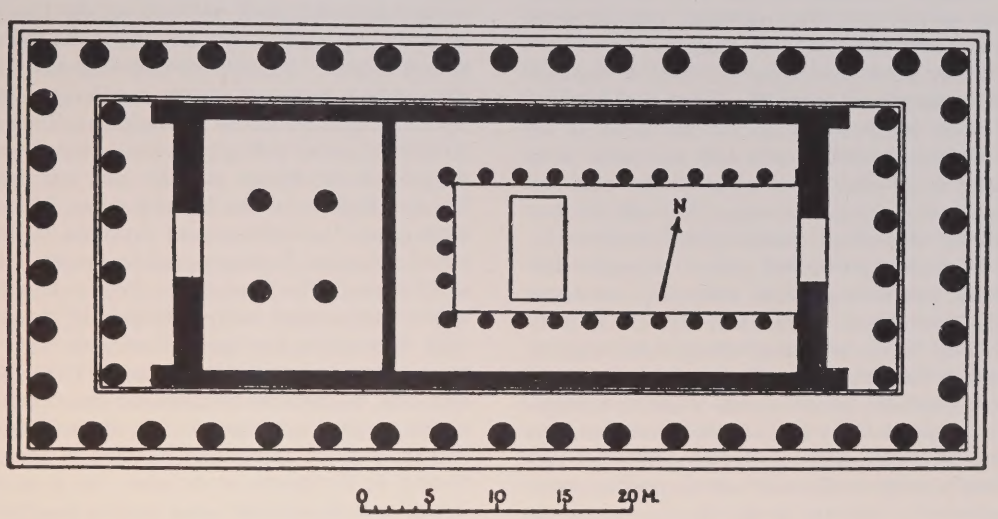
22. Plato, *Hippias Major*, p. 290 B; Paus. 1.24.5 (Overbeck 653, 649).
23. Thucyd. 2.13; Plut. *De Vitando Aere* al. 2; Diod. Sicul. 12.40 (Overbeck 655-657); Paus. 1.25.6 (Overbeck 685).
24. Schol. Aristoph. *Pax* 605 (Overbeck 629, line 18).
25. Paus. 1.24.5 (Overbeck 649); Maxim. Tyr. *Diss.* 14.6; Ampel. *Lib. Memorial.* 8; Plin. *HN* 36.18 (Overbeck 659, 672, 661).
26. *IG* II[2], 1338, lines 52-53; Koehler, *AthMitt* 5 (1880) 96.
27. See n. 13 above.
28. *IG* II[2], 1407, 1410, 1443, 1468, 1477; W. S. Ferguson, *The Treasurers of Athena* (Cambridge, Mass. 1932) 119, n. 1; 123 f.
29. Dinsmoor, *AJA* 38 (1934) 96, n. 3, where also some of the earlier estimates of the gold plating are quoted.
30. Lucian, *Somn.* 24; transl. by H. W. Fowler and F. G. Fowler, III (Oxford 1905), 121.
31. Lucian, *Jupp. Trag.* 8 (transl. ibid., 84).
32. Paus. 5.11.10 (Fraser's translation).
33. J. W. Graham, "Acropolis and Parthenos: New Models in the Royal Ontario Museum." *Greece and Rome* 10, Suppl. 1963, 81.
34. Particularly Stevens, *Hesperia* 26 (1957) 350-361.
35. W. R. Lethaby, *JHS* 37 (1917) 140.
36. A. Mallwitz and W. Schiering, *Die Werkstatt des Pheidias in Olympia* ("Olympische Forschungen" 5, 1964) 98.
37. Stevens, *Hesperia* 26 (1957) 356. At Olympia over 60 clay piece moulds for chasing, sometimes reinforced with iron bars, have been found. Of about 0.25 m x 0.25 m they show the negative modelling of the drapery of the statue of Zeus and the Nike. Kunze, *Gnomon* 27 (1955) 220 ff.; *AJA* 60 (1956) 271, pl. 97; *Olympiaberichte* VI, p. 8; L. Drees, *Olympia* (1967) 174, n. 19. Similar moulds may have been used for Athena but it is also possible that the shaping of the gold of her drapery was done directly over the finished wooden core. Perhaps at Olympia the shaping directly over the core was made difficult because of the statue's sitting position. Also the fact that in Athens the gold plates had to be easily detachable may have influenced the technique of their manufacture and attachment.
38. *Hesperia* 13 (1944) 173 ff.; *Hesperia* 2 (1933) 519-527, pl. XV, figs. 5-9; and particularly H. A. Thompson, "A Golden Nike from the Athenian Agora," *Harvard Studies in Classical Philology*, Suppl. 1 (1940) 183 ff.
39. E. F. Schmidt, Persepolis II, *Contents of the Treasury and other discoveries* ("Oriental Institute Publication" 69, 1957) pls. 33-34.
40. *Hesperia* 26 (1957) 358.
41. See Part I, n. 12.
42. P. Reuterswärd, *Studien zur Polychromie der Plastik—Griechenland und Rom* (Stockholm 1960) 102-104. The golden cloak of Zeus at Olympia was decorated with multicoloured ornaments as described by Pausanias (5.11.1 ff.) and as confirmed by the remains of glass inlay, ivory chips, and obsidian in Phidias' workshop on the site; Mallwitz and Schiering, *op. cit.*, pp. 103, 141; M. S. F. Hood, "Archaeology in Greece, 1954," *JHS* 75 (1955) Suppl., p. 11; E. Kunze, "Olympia," *Neue Deutsche Ausgrabungen im Mittelmeergebiet und im Vordern Orient* (1959) 284-291, figs. 23-29.

III. Detailed Description

A. BASE

1. Form

Literary sources tell us that the gold and ivory statue of Athena was made by Phidias and was dedicated in the Parthenon in 438 B.C.[1] The only surviving traces of the statue are the remains of its base in the east cella of the temple, the Hecatompedon[2] (Fig. 61). The marble blocks of the original base or



Plan of the Parthenon (after Dinsmoor, *AAG*[3], FIG. 57)

pedestal stood, for reasons of economy, on a poros foundation instead of on the marble slabs with which the rest of the floor of the cella was paved. The blocks of the base however overlapped the poros foundation and extended on all four sides over the marble pavement. The preserved outline of the complete original base on the pavement measures 8.065 m from north to south, and 4.10 m from east to west, but only six of the marble blocks, belonging to the interior of the base, are now *in situ*. Their height is 0.30 m.

Another very important feature is the socket in the poros foundations, visible also in the preserved marble blocks above it, for the vertical wooden beam which ran through the base into the statue as the principal member of the armature of the colossal image. The rectangular hole measures 0.755 m x 0.54 m on the surface with a narrower cutting of 0.755 m x 0.45 m at the bottom.

As testified by the Lenormant and the Varvakion copies the base had three courses which consisted of a plinth at the bottom, a frieze with twenty-one figures in relief representing the Birth of Pandora (Paus. 1.24.7; Plin. *HN* 36.18) in the middle, and a set of mouldings at the top. Stevens estimates the clear height of the cella to have been 13.09 m. From an average of the relation of the height of the figure to the height of the base in the Varvakion (1:10) and in the Lenormant (1:8, if the crest were preserved) statuettes, the height of the original base he further estimates at 1.437 m. Such a height, a little under the average eye level, would permit the spectator to see without difficulty the lowest parts of the colossal statue. The total of 1.437 m for the base included the lower course which was 0.30 m high, as shown by the preserved marble blocks; the figured frieze about 0.937 m high; and the crowning set of mouldings about 0.20 m high. Taking into account the height of the base and the clear height of the cella, as he has very plausibly calculated them, Stevens is confident that Pliny's reported height of the image of 26 cubits (11.544 m) included the base.[3] The height of the statue alone was thus 10.107 m.[4]

Stevens suggests that the background of the figures of the frieze was somewhat recessed (about 0.28 m) behind the face of the bottom course, and the figures themselves placed on a low member in order to be raised suitably from the pavement. This member would reduce the height of the frieze itself to about

0.75 m. The existing blocks of Pentelic marble from the interior of the base indicate that the same material was most probably used for the rest of the base. The central supporting beam or "backbone," which naturally reached all the way up into the head of the statue, is on the axis of the nave, indicating that the statue too was centred on the axis. This fact has a bearing on the later discussion of the column supporting the Nike. The dressings of the pavement in front of the pedestal indicate the position of a raised rim enclosing a wide, shallow basin for water used to supply humidity for the ivory, as Pausanias informs us (5.11.5). The maximum dimensions of this basin were about 30 feet square.[5]

A further point concerning the form of the base should be mentioned here. The fact that the dimensions of the base, as indicated by the traces on the floor of the cella (8.065 m x 4.10 m), seem to be unusually large even for a statue of this size, has prompted some scholars to suggest that only the lowest member of the base, consisting of a very low step, filled the entire eight by four metres rectangle, while the actual base resting on this lower step and carrying the statue was considerably shorter in both dimensions. A reconstruction along these lines by Michaelis[6] was refuted by Winter in his important study of the base.[7] More recently a similar arrangement was suggested by K. Lehmann-Hartleben.[8] He inserted an intermediate step between the wide bottom step and the actual base and on this he placed the accessories—the shield and the serpent on the left, and the column with the Nike on the right—thus providing the accessories with a different ground-level from that of the statue itself (Fig. 62). This theory has been sharply condemned as ugly and non-classical in conception.[9] Moreover, it disagrees with the available archaeological evidence, while the literary evidence, which he adduces to justify his reconstruction, is not sufficiently conclusive. In my view, the consideration most strongly opposed to such a reconstruction (and one that has hardly been emphasized), is that a base, reduced to about less than one half of the length of its shallow bottom course could not accommodate 21 figures (or perhaps even 23, as reckoned by Lehmann himself) in the scene of Pandora's birth, unless they were reduced to a ridiculously small size.

2. Decoration

The base of the Parthenos is mentioned by Pausanias (1.24.7; Overbeck 649):

> ἔστι δὲ τῷ βάθρῳ τοῦ ἀγάλματος ἐπειργασμένα Πανδώρας γένεσις. πεποίηται δὲ Ἡσιόδῳ τε καὶ ἄλλοις, ὡς ἡ Πανδώρα γένοιτο αὕτη γυνὴ πρώτη

and by Pliny (*HN* 36.18; Overbeck 661): . . . *in basi autem quod caelatum est* Πανδώρας γένεσιν *appellant, di sunt nascentes* XX *numero*. There are several conjectural readings of the last part of the passage, but the meaning surely is that 20 gods were present, "nascenti adstantes," at the scene of Pandora's creation which was "caelatum," chased or wrought, on the base of the image.[10]

Only two of the copies of the Parthenos attempt to reproduce the reliefs on the base: the Lenormant statuette (No. 1, Fig. 63) and the statue from Pergamon (No. 21, Fig. 64). On the Lenormant statuette, which is small and notably sketchy in execution, a total of six figures can be discerned. Their interpretation is rather difficult but it has been commonly agreed that the figures at either end represent the Sun-god Helios and the Moon-goddess Selene with their teams,[11] a cosmic motif favoured by Phidias elsewhere on the Parthenon, and on the base of Zeus at Olympia.[12] The base of the Pergamon statue is unfortunately rather badly damaged: of the original eight or possibly ten figures,[13] only six have been more or less fragmentarily preserved. They do however give us precious evidence for the central part of the original composition: the draped figure of Pandora can be recognized standing in the centre flanked by the figures of the gods; she is in a rigid frontal attitude with her arms hanging limply at her sides. From the remains of the other five figures, two on one side of Pandora, and three on the other, attempts have been made to identify the other gods present at the legendary creation of the first woman, and to reconstruct the entire scene. Helpful in this are other representations of the Creation of Pandora, some of them preceding Phidias, and some of them recognized as deriving from the Phidian composition on the base of the Parthenos.

According to the story in Hesiod Pandora was created on Zeus' order to be the first woman, and a punishment to the human race; she was modelled out of clay by Hephaestus, and was then endowed with various gifts by other gods, primarily by Athena herself.[14]

The story of Pandora is not very often treated in art. In vase painting three vases are so far known to represent this subject with certainty:[15] 1. *an Attic calyx-crater by the Niobid Painter* (abouth 460-450 B.C.) in the British Museum, *BMCat Vases* III, E 467; Beazley, *ARV*², 601, No. 23; *id.*, *Hesperia* 24 (1955) 316, pl. 88 a; Becatti, pl. 11, fig. 31 (Fig.

65); 2. *a white-ground cup from Nola by the Tarquinia Painter* (second quarter of the fifth century B.C.) in the British Museum, *BMCat Vases* III, D 4; Beazley, *ARV*², 869, No. 55; *id.*, *Hesperia* 24 (1955) 317, No. 43; Becatti, pl. 11, fig. 29; 3. *fragment of a rhyton by the Sotades Painter* (second quarter of the fifth century B.C.), excavated in Cyprus, in the British Museum, *BMCat Vases* III, E 789; Beazley, *ARV*², 764, No. 9; *id.*, *Hesperia* 24 (1955) 317, No. 43; *CVA* III i c, pl. 37,4; 39,2.

On all of these Pandora can be seen in a central position among other figures, in a frontal pose, her feet close together and her arms drooping by her side, a figure "rigid . . ., doll-like, small, passive, and humble," as described by Beazley.[16] Other figures can be recognized as various gods and deities, such as Athena and Hephaestus on the white-ground cup; Athena, Poseidon, seated Zeus and Iris on the left of Pandora, with Ares, Hermes, and Hera on the right, on the calyx-crater. The remains of the figures on the Pergamon base show that the Phidian composition was conceived on the same general scheme.

Puchstein, Winter, Lethaby, and Schrader have contributed the most important older studies of the base.[17] It is only more recently however that, with the help of additionally recognized evidence, a more satisfactory reconstruction of the original has been achieved. Becatti's and Praschniker's contributions represent a great step forward, and will be discussed here.[18]

All of these studies agree that certain later works are strong reflections, if not exact copies, of the reliefs from the base of the Parthenos. On the grounds of these works they try to reconstruct the original frieze-like composition.

Schrader's great merit is that he was the first to relate a Neo-Attic relief in the Palazzo del Drago (Villa Albani) in Rome, to the base of the Parthenos, more exactly to the left portion of it[19] (Fig. 66). The relief, 1.48 m in length and 0.61 m in height, and made of Greek marble, is dated to the Hadrianic period by Becatti. It contains the following figures from left to right: Zeus seated on a throne, facing right, Hades, Persephone, Poseidon, and Amphitrite. The fact that the narrow sides of the relief are unframed, in contrast to the use of moulding along the upper edge, and a ledge along the bottom, seems to indicate that this is only part of a group with other figures following to left and right.

Another work, recognized as deriving from the same original as the Del Drago piece, is a relief found in the sanctuary of Asclepius in Corinth.[20] The throne, the arrangement of the folds of the himation, and the attitude of the legs of the seated figure in both of these reliefs correspond so closely that they must be considered copies of a common original. The only difference is that on the Corinthian relief there is a female figure dressed in a Doric chiton with a long girdled overfold standing behind the throne; she represents an additional figure among the already mentioned members of the divine assembly. Her identity will be considered later.

The third work, in a way confirming the accuracy of the Del Drago relief, is a Neo-Attic triangular marble base of a candelabrum in the Lateran.[21] Dated to the Augustan period by Becatti it very closely reproduces on its three sides the figures of Hades, Persephone and Poseidon as they appear on the Del Drago relief. The figures on the candelabrum are in the same order as those on the Del Drago relief, indicating that the copyist had followed the original succession of the figures and not merely made a selection.[22]

The three female figures on Pandora's right, as they are seen on the Pergamon base, have been recognized, following Hesiod's story, as the three Charites or Horai bestowing their gifts of grace and beauty upon the newly created Pandora. Adding them to the rest of the figures already mentioned for the left side of the base a total of ten figures can be accounted for. They are from left to right: Helios with a team of horses, a female figure behind the throne of Zeus, Zeus, Hades, Persephone, Poseidon, Amphitrite, and the three Charites. The eleventh and central figure is, of course, Pandora. The figure behind the throne has been interpreted as Hebe by Praschniker, and as Hera by Becatti.

We are far less fortunate concerning the evidence for the right side of the base. Here the attempts to fill in the figures and to place them in a certain order can be considered no more than a suggestion, a "raumfüllender Vorschlag," as Praschniker has expressed it. From the tradition of the story preceding Phidias, consisting of Hesiod's description of the event and the representation of the Creation of Pandora on the three vases mentioned above, Athena and Hephaestus are certain to have been present, and since they cannot be recognized among the figures on the left side, they must have been on the right. The calyx-crater in the British Museum introduces also Iris, Ares, Hermes, and Hera, making thus a total of six possible figures and one certain one, that of Selene, for the right side.

Athena is most probably to be found immediately next to Pandora, to whom she is teaching the art of weaving.[23] For the other deities a grouping in pairs,

similar to the arrangement on the left, can be assumed. Pausanias' detailed description of the base of Zeus at Olympia also suggests this type of composition.[24] In an attempt to arrange his reconstruction symmetrically Becatti places Demeter on the right side next to Athena who in turn is next to Pandora: he recognizes Demeter in the matronly-looking figure in chiton and himation to the right of Athena on the Pergamon base. Demeter he couples with Hephaestus. Other Olympian couples to follow would be: Aphrodite-Ares, Artemis-Apollo, and Hestia-Hermes. The scene is closed with Selene. As a balance to the seated Zeus on the left Becatti proposes a seated Hestia. His entire reconstruction would thus appear as follows:

Helios
Hera
Zeus
Hades
Persephone
Poseidon
Amphitrite
Horai or Charites
Pandora
Athena
Demeter
Hephaestus
Aphrodite
Ares
Artemis
Apollo
Hestia
Hermes
Selene

Praschniker, on the other hand, recognizes a man rather than a woman in the figure wearing chiton and himation next to Athena: instead of Demeter the figure would represent Hephaestus. As a possible piece of evidence for some of the other figures on the right side Praschniker quotes a column-drum from the later Artemision at Ephesus, now in the British Museum. Its relief representation had long ago been interpreted by A. H. Smith as the Making of Pandora.[25] This interpretation is strengthened by the fact that some of the figures from the Ephesus drum appear on the Del Drago relief: the central female figure, pulling up a himation in a rather coquettish gesture, can be identified with the figure from the right on the Del Drago relief. The figure of Zeus, seated on a throne to right, also appears, although in reverse, on the relief. Yet another figure from the drum Praschniker thinks can be identified with the left neighbour of Pandora, but reversed, on the Pergamon base. He concludes therefore that the drum is related to the base of the Parthenos and that, for a reconstruction, it would be justified also to use the other figures from the drum, namely the winged figure interpreted as Eros, the figure of Hermes, and the figure seated at the left on the throne of which unfortunately only little remains. The figure of Selene, her veil drawn over her head, although sketchy on the Lenormant base, can be recognized as riding on a horse. The animal, its head lowered, appears to be stepping slowly downwards.[26] The number of 20 gods would then be made up of the following:

Helios
Hebe
Zeus
Hades
Persephone
Poseidon
Amphitrite
Horai
Pandora
Athena
Hephaestus
Eros
Aphrodite
Hermes
?
?
Hera
Iris
Selene

Two of the figures on Praschniker's graphic reconstruction, the fourth and the fifth from the right, are not identified in his text[27] (Fig. 67).

Comparing the two reconstructions, Becatti's arrangement of the left side with Hera instead of Hebe behind the throne of Zeus seems to be the more logical since all other deities on the left side are arranged in couples. As for the right side, it is very difficult indeed to conceive a grouping. The evidence of the Ephesus drum cannot be entirely trusted because its representation has been variously interpreted.[28] It seems that for the right side a compromise between the two reconstructions would be desirable. While Becatti's proposal seems to cover the main Olympian deities in a more adequate way than that by Praschniker, the central location of Athena and Hephaestus, as suggested by the latter, seems to be more acceptable, following both literary and archaeological sources. The following arrangement is therefore proposed (Fig. 68):

Helios
Hera
Zeus
Hades
Persephone
Poseidon
Amphitrite
Horai
Pandora
Athena
Hephaestus
Eros
Aphrodite
Ares
Artemis
Apollo
Hestia or Demeter
Hermes
Selene

One might wonder about the significance of the myth of Pandora and its connection with Athena Parthenos. It has been suggested that, like Erichthonius, the earth-born snake fathered by Hephaestus in his desire for Athena, Pandora, who was made out of clay by Hephaestus, also represented an autochthonous Attic deity in the full sense of the word. She was closely connected with both the soil of Attica, which she could make fertile, and the goddess Athena.[29] Similarly, Pandora has been likened to Athens herself upon whom the gods had bestowed many gifts.[30] Another similarity between the two, one ventures to suggest, is the analogy of their miraculous full-grown birth with an assembly of gods looking on. In any case, we should like to stress, it is the quiet and serene moment of Pandora's genesis in which she, as the first woman, receives the divine gifts, and not her later indiscreet deed by which she brought misfortune to mankind, that Phidias chose to represent on the base.

It is very difficult to determine the technique in which the figures of the relief on the base were executed because there is very little in the sources that could lead to any definite conclusions. Pausanias (5.11.8) tells us that the relief figures on the base of Zeus at Olympia were of gold, χρυσᾶ ποιήματα. Actually they would have been of gilded bronze, and the pedestal to which they were dowelled was of bluish-black Eleusinian limestone.[31] In his very thorough study of some of the inscriptions from the Acropolis dealing with the Parthenos and the Parthenon, Köhler has maintained that parts of the Parthenos base were of gold.[32] The lists of the treasures in the Hecatompedon mention among other items two helmets "from the base," ἀπὸ τοῦ βάθρου. One of these (*IG* II, 676, 40 ff) is "a small helmet from the base with golden cheek-pieces and an ivory crest." The other (*IG* II,^{2} 1455, lines 10-12; 1443, lines 208-210) is a "small golden helmet from the base without the cheek-pieces; it is lying by the wall." Both of these inscriptions, according to Köhler, refer to one and the same object which had deteriorated in the period between the two "traditiones" or inventory-takings. This would indicate that the base was chryselephantine or, at least, of a chryselephantine appearance. Doubts have been raised,[33] rightly in our opinion, that these two mentions of a small helmet refer to the reliefs from the base: they are mentioned together with some other gold objects from the base, ἀπὸ τοῦ βάθρου, earrings and rings,[34] and these are obviously offerings placed *on* the base, and not an integral part of it.

In his analysis of the pedestal Stevens says that on the evidence of the Pergamon base, where the figures were carved on the face of a white marble block probably imitating the original in this respect, we can assume that similar marble figures were carved upon the marble base of the Parthenos.[35] They would have been about 0.75 m high on a background which was probably painted to make them stand out. Another possibility is that the blocks of the middle course of the base, that is those forming the background for the frieze, were of dark Eleusinian stone, and that the white marble figures were dowelled to these blocks. But no Eleusinian blocks suitable for Athena's base have been found on the Acropolis, and all that can safely be said is that the relief was made of "marble figures carved on marble blocks."[36]

In our opinion, however, there is no reason strong enough to prevent us from assuming that the high relief figures were worked in gilded bronze and dowelled to the marble base. There are actually three points in favour of this assumption: first, the relief on the base of Zeus at Olympia was made in this way, as shown by the actual remains of the base;[37] second, if the Parthenos relief had been carved in marble, we might expect that at least some fragments of it would have come down to us, whereas in point of fact no such reliefs have been found on the Acropolis. The third and perhaps the strongest point is that in Pliny's description (*HN* 36.18) the same verb "caelare" is used to describe the way in which both the Amazonomachy of the shield and the Πανδώρας γένεσις on the base were made. There is no doubt that the Amazonomachy was a work of "caelatura" or τορευτική, the toreutic art, and that thus it was a product of metalwork.[38] In its comprehensive meaning the term "caelatura" or τορευτική could mean "carving, chasing and engraving in gold, silver, bronze, ivory or gems," but it is never used for sculpture in general or sculpture in stone in particular.[39] It appears then that it would be safe to conclude that the relief figures representing the Birth of Pandora on the base of the Parthenos were chased or cast in metal, and that—following the latest calculations[40]—they were of gilded bronze rather than of gold.

Concerning the form of the top and the bottom courses of the base Praschniker restores them both as consisting of two members, a plain fillet and a *cyma reversa* (Lesbian) moulding.[41] This he does on the evidence of the Varvakion base which has a similar profile and shows traces of a leaf-and-dart motif painted partly in red and partly in yellow outline on the upper moulding.[42] Stevens, on the other hand, restores the bottom course as a simple strong plinth above which a slightly recessed member carries the relief frieze of the middle course. The upper profile, roughly resembling that of the Varvakion, he leaves undecorated.[43]

In our reconstruction, we have followed Stevens for the bottom course. The upper moulding, however, we have decorated with a leaf-and-dart motif in relief. This motif, apart from the Varvakion evidence, was also used above the frieze of the cella, as pointed out by Praschniker. It is moreover almost certain from the remains in Olympia that the same motif, worked in metal as a separate part, was applied to the top and bottom profiles of the base of Zeus.[44] We are certainly justified, then, in suggesting its use on the base of the Parthenos (Fig. 69).

B. FIGURE

1. Peplos

The colossal figure of Athena rose majestically from the centre of the wide base with the central of the

five Doric columns along the west side of the double-tiered cella directly behind her. She was dressed in what Pausanias very briefly describes as a χιτῶν ποδηρής (1.24.7), a chiton that reached down to her feet. The copies, more informative than that, show that the dress was what is generally known as a Doric peplos: a simple garment, draped from a quadrangular piece of woolen cloth, pinned together on the shoulders, and falling open (it also could be sewn together) down the right side of the wearer. On the Parthenos the shoulder fastening is concealed by the aegis, and the right side is open.

A descendant of the heavy, fold-less Homeric πέπλος, the Doric peplos or chiton, as it is also called, is the oldest type of female costume worn on the Greek mainland. Although the lighter and more elaborate linen chiton, worn in Ionic Asia Minor, became the prevalent fashion in Athens in the second half of the sixth and the early fifth century B.C., the Doric peplos in all its numerous varieties reasserted itself and became, after the Persian wars, the favourite costume of Greek women.[45] The fashion, with a long or short overfold, girdled or ungirdled, is freely reflected in contemporary classical monuments, particularly in the sculptural decoration of the temples where the restrained but elegant forms of the Doric dress harmonized well with the surrounding architecture. In the case of the Parthenos, as our model of the figure and its setting in the cella so vividly illustrates, the perpendicular, quietly falling folds of her drapery blend harmoniously with the flutes of the surrounding columns (Fig. 60).

Of the various forms a Doric peplos could assume the most characteristic is the "peplos of Athena," the variety seen on the copies of Athena Parthenos. It has a long girdled overfold (ἀπόπτυγμα or διπλοΐδιον) with the fullness pulled out from under the belt at the sides (κόλπος).[46] The rich arrangement of the folds agrees on the various copies to a surprising degree. The most characteristic of these folds are: the one falling rather flatly from the knee of the left, relaxed leg; the central, "axial," fold in front; and the pouchy folds formed by the κόλπος, with the characteristic V-shaped centre between the aegis and the girdle in front and back. There is usually a crease in the long chiton where it meets the feet, which is more pronounced on the left, i.e. relaxed, foot. The folds on the back are similarly arranged on all the copies although they are treated in somewhat flatter style than those on the front because, no doubt, both the original and the copies were meant primarily to be seen from the front. The strong undercutting of the folds, particularly noticeable at the lower edge of the overfold below the hips of the figure, is foreign to the marble technique, and is a vivid reflection of the original metal technique.

The girdle on most copies shows a novel treatment: formed by two snakes knotted with their heads at the front, the motif is believed to have been invented by Phidias himself.[47] On some copies, such as the Villa Wolkonsky (No. 14), Villa Borghese (No. 8), and the Acropolis torso (No. 17), the snake knot in front has degenerated into an ordinary spiral motif. Sometimes another knot of the snakes' tails is visible in the back, as on the Baltimore and the Villa Borghese copies. The Varvakion copy shows a thickening of the girdle in the back suggesting that possibly there was a knot in the original.

Another interesting detail is the fold formed down the right-hand side of the wearer where the two perpendicular edges of the peplos meet. From other fifth century representations in Greek art one can see that the pattern of these folds is either in the form of diamonds or parallel zig-zags. The former is the older, archaic, tradition whereas the latter is an advanced, more naturalistic, development which can particularly well be followed on the vase painting of the fifth century. This detail on the Parthenos is treated with great freedom on the part of the copyist. The Varvakion (No. 2, Fig. 3) and the Madrid (No. 3) statuettes show a parallel pattern, the Villa Wolkonsky (No. 14), Villa Borghese (No. 8), Villa Ludovisi (No. 20), and the Baltimore (No. 18) statues, the Belgrade (No. 4) statuette, the Conservatori (No. 7) and the Enneakrounos (No. 9) torsos, have a diamond-shaped pattern, while some, such as the Acropolis torso (No. 17), are a definite contamination of the two types. The "Minerve au Collier" (No. 19) is similar to the Varvakion and the Madrid statuettes, but it, too, shows a tendency toward the diamond pattern in the upper part. Noack, who has studied the detail at length,[48] believes that the original must have followed one or the other of the two main types, and that the diversity of this treatment, as observed in the copies, probably stems from the fact that at least part of them were copied from a source other than the original, from an "Urkopie," as he calls it, which in its turn was already modified in this detail. Although quite possible, this is still only a speculation, and all that can be said is that, while agreeing in the form of the peplos and its main folds, the copies show great variation in this detail. This is due perhaps to the fact that the complicated line of the pattern of the folds was rather difficult for the copyist to follow, particularly since in the metal technique of the original the pattern must have

been more developed than in the reduced marble copies. It is difficult to believe that the long and flattish folds, as we see them on the Varvakion and the Madrid statuettes, follow the original, and in our reconstruction we have imitated the more harmonious and richer pattern of the "Minerve au Collier" (Fig. 70).

2. Aegis

Several literary sources briefly mention that Athena wore an aegis,[49] but Pausanias (1.24.7) adds that "on her breast is the head of Medusa, wrought in ivory." In addition, scholiast to Aristophanes *Pax* 605 (Overbeck 629) reports that Phidias was accused of stealing the golden snakes of the gold and ivory Athena, most probably referring to the snakes of the aegis and not the snake bracelets.[50] Pausanias' brief report obviously suggests that the aegis itself was of gold.

All the copies of the Parthenos show the aegis, the most important attribute of Athena after the helmet. Its length is approximately equal on all the copies, covering the breasts in front, and reaching to below the shoulder blades in the back (a rare exception is the Patras copy where the breasts are not completely covered). This length represents an intermediate phase between the long archaic form covering the body like a mantle, and the later, abbreviated, collar-like form.[51] On most of the copies the aegis is covered with scales, worked in slight relief, and its edges are fringed with coiling snakes.[52] On marble copies the snakes are worked either in the same material, as on the Varvakion statuette, the "Minerve au Collier," and many others, or they were made of bronze and separately inserted, as on the Madrid and the Belgrade copies. None of these bronze snakes has been preserved, and only the holes for insertion tell of their former existence. The Hermitage medallions (No. 38), the Aspasios gem (No. 36), the terracotta medallion from the Agora (No. 52) and another one from a Calenian bowl (No. 66) show the spear of the goddess supported in the coil of one of the snakes on the left shoulder. None of the marble copies shows this detail because there is no indication that the spear was reproduced on any of them. It is quite probable, however, that on the original the long heavy spear was held in place by one of the snakes of the aegis. Pausanias, to be sure (1.24.7), mentions the spear as held in the left hand «. . . ἐν δὲ τῇ (ἑτέρᾳ) χειρὶ δόρυ ἔχει . . .» but his description, being notably sketchy on various points, might simply mean that the spear was on the left side of the goddess. Our three-dimensional reconstruction has clearly brought out the fact that if the spear is held at one fixed point by one of the snakes on the shoulder—and this unusual detail on the above mentioned copies in the minor arts ought to be trusted—it cannot at the same time pass through Athena's left hand, another fixed point, without interfering with the shield and the snake.[53] (Fig. 60).

All the copies except the Lenormant show a gorgoneion in the middle of the breast, holding together the edges of the aegis.[54] Unlike the earlier, archaic, representations of the gorgoneion, which show it as an ugly sneering monster with sharp teeth, a protruding tongue, and fangs, on all the copies of the Parthenos the gorgoneion of the aegis, and the gorgoneion of the shield for that matter, conforms to the later, "middle" type, as we see it represented in art from about the mid fifth century to the first part of the fourth, when it is no longer the head of a monster, but of a human being although ugly. The face of the "middle" type is still round and flat, and the tongue protruding, but the mouth is smaller and less sneering, and the fangs are gone. The hair is parted in the centre and waved.[55]

On some copies the snakes around the edge are arranged in such a way as to surround or frame the gorgoneion. This, however, as well as the rest of the detailed arrangement of the snakes differs greatly on the various copies. In reconstructing this detail, as in many other details, it is necessary to exercise a certain freedom of judgement within, of course, the limits delineated by the copies, and by the general style of the period.[56]

For the general shape of the aegis we have in our reconstruction followed that seen on the Varvakion and on most other copies, which show it cut off rather squarely below the breasts and on the back. The snakes along the edges, although similar in arrangement and approximately corresponding in number to the Varvakion copy, have been worked in metal and separately inserted (as they no doubt would be on the original), and are therefore freer and more detached. Following the Aspasios gem and the gold medallions one of the snakes on the left shoulder supports the spear in its coil. The gorgoneion is of the "middle" type, as on the Varvakion copy, and the aegis is covered with slightly raised scales (Figs. 71, 72).

3. Legs: Sandals

The sources referring to the sandals of Athena are Pollux (*Onom.* 7.92; Overbeck 666), and Pliny (*HN* 36.18; Overbeck 661). The first gives us the type

and the shape of the sandals, the second mentions their decoration, which consisted of a representation of the battle of Lapiths and Centaurs.

The sandals which Phidias gave the statue of Athena were of the so-called τυρρηνικά type, consisting of a heavy wooden sole with gilded straps or thongs. Indeed, all the copies of the Parthenos, where the feet are preserved or represented, show the heavy sole which usually follows the shape of the foot with a more or less pronouced incurving line between the first two toes.[57] The thongs are represented on some copies, such as that from Gortyn (No. 15) or on the Ludovisi copy by Antiochos in Rome (No. 20), where they are worked in relief, as they probably were on the colossal gold and ivory original. On other copies they were most probably painted on, as was the practice on other marble statues in antiquity, but this has not been preserved.

The commonest decoration of the soles on the copies is a simple braid motif running in two or three horizontal rows, as on the statues in the Villa Borghese (No. 8), the Antiochos statue (No. 20), or on the foot belonging to the head in Berlin (No. 24). The Varvakion statuette shows only an undecorated double sole. The Madrid copy (No. 3) has an unusually high but undecorated sole. The reason that the decoration, as described by Pliny, is omitted on the copies is probably their reduced size, for the soles of even the largest ones are several times thinner than those of the original.

Until recently no copies or derivations of the Centauromachy of the sandals could be traced. Lately, however, attention has been drawn to a marble vase in Madrid with reliefs consisting of three combat groups of Centaurs and Lapiths[58] (Figs. 73, 74, 75). The style of the bodies on the vase reliefs, and their attitudes, are strongly reminiscent of the Phidian sculpture of the Parthenon, the Centaurs being close to those of the south metopes, the Lapiths to the figures of the Amazonomachy of the shield. Langlotz has pointed out yet another possible copy of the reliefs from the soles, a marble relief in the Lateran.[59] The group of a Lapith and a Centaur is obviously derived from the same original as the groups on the marble vase to which it is very closely related though the figures are in the reverse position. The Lateran relief is 0.33 m high, and the original soles, as calculated by Langlotz and Becatti, were of about this height: Langlotz even goes so far as to suggest that the Lateran relief is a copy on the same scale as the original.[60]

Since there is no strong reason for denying the possibility that these reliefs are copies or derivations from the reliefs of the soles we have, in our reconstruction, tried to indicate the combat groups of the Lapiths and the Centaurs as they appear on the marble vase in Madrid.

4. Arms: Bracelets

The bracelets, like the rest of Athena's jewellery, are not mentioned in any of the sources,[61] and our only guide in the reconstruction is the archaeological evidence. Since on most of the copies the arms are either missing, or are a modern restoration, we can rely on the evidence of primarily two copies only, the Varvakion (No. 2) and the Belgrade (No. 4).

We see that on both of these the bracelets are of the "snake" type, which was the most popular throughout the whole of antiquity. Their form on the two copies consists of two to three simple coils with ends only slightly accentuated, thus conforming to the earlier representations on vases and to some preserved Greek examples.[62] This shape is definitely different from the later variety of the "snake" bracelet, prevalent in Hellenistic and Roman times, in which the snake is much more naturalistically represented, with a detailed head, coils, and a sinuous tail.[63]

On the Varvakion copy the bracelets are on the forearms only, but the Belgrade copy shows them on both fore and upper arms. Although this is rather unusual (in the vase paintings the bracelets are almost without exception worn on forearms only) it is quite probable that, for technical reasons, the colossal ivory arms wore the bracelets in both places. It was probably quite convenient to have the large surfaces of ivory veneer, consisting of many smaller pieces, divided up in as many parts as possible. The gold bracelets would conceal the joints, and would serve as a kind of binding and reinforcement.[64] In our model we have followed the Belgrade copy in this respect, and have provided Athena with four snake bracelets, two on the upper arms, and two on the forearms. They consist of two full coils each.

5. Head:

a) Face and hair

The literary evidence pertaining to the head is extremely scanty. Pausanias says nothing of the head except briefly to describe the helmet (see *b*) below). The face is mentioned only in Plato, *Hp. Mai.*, p. 290 B (Overbeck 653) who says that it, as well as the hands and the feet, was made of ivory, and the eyes of precious stone. Maximus Tyrius (*Diss.* 14.6; Overbeck 659) refers to the Parthenos as ". . . Athena . . . in no way worse than the poetry of

Homer, the beautiful virgin, owl-eyed . . ." which, of course, tells us little of the true appearance of the face.

The archaeological evidence, though there is much more of it, is not much more helpful. Artistically the quality of the copies is, as a rule, mediocre, and reveals little or nothing of the spirit and the expression the original must have possessed. Collectively taken, however, the copies are accurate enough to provide information on the tangible details of the head, and to enable us to reconstruct its general appearance.[65]

Examining the copies we see that in most of them the type of the face is a massive oval with a rather heavy, rounded chin. Among the marble replicas the type is best illustrated by the Varvakion, the "Minerve au Collier," the Antiochos statue in Rome, and the head in Paris (Nos. 2, 19, 20, 26, Figs. 2, 13, 14, 19). Practically all the copies in minor arts where the head or the bust is represented, show this type. To name only a few, they are the Hermitage medallions, the gilded bronze medallions in the Louvre, the Aspasios gem, the terracotta medallion in the Royal Ontario Museum (Nos. 38, 39, 36, 58, Figs. 42, 43, 38, 55).

A marked exception to this tradition is the statuette in Madrid (No. 3) and, to a lesser degree, the heads in Berlin and Copenhagen (Nos. 24, 25, Figs. 16, 18). The facial type in these copies, more slender and elongated, has been considered contrary to the Phidian tradition, and largely due to the style of the Roman copyist. True, the fleshiness of the Varvakion face is exaggerated, but there is no reason to doubt that the heads in Paris, both that of the "Minerve au Collier" and the separate head (No. 26, Fig. 19), as well as the heads of the Belgrade and the Lenormant statuettes, and the Pergamon statue (Fig. 22), showing less heavy but nonetheless generous features, reflect the genuine Phidian tradition. Bestowing upon his image, to quote Furtwängler,[66] a "joyful and victorious countenance," Phidias gave the goddess "a somewhat broad, full face; it was to express radiant health and well-nourished vigour, for the goddess was the personification of the great and brilliant Attic Empire. This was no place for the severe and thoughtful Athena, with the delicate cheeks. The deeper intellectual expression must make way for the representation of joyous wealth and splendour." The "delicate cheeks" refer, of course, to the Lemnia, and if we wonder about the difference in type between the Lemnia and the Parthenos, Furtwängler's answer is that "this is an admirable testimony to the fact that the great artists of antiquity did not repeat the same type again and again, as modern critics would fain have us believe, but, like artists of more recent times, indefatigably created new forms to embody new ideas." The difference between the two types has in fact prompted Reinach to wonder whether the same master who produced a type as energetic and heavy, and still so much a part of the archaic tradition as the Parthenos, could have, even if endowed with a genius most capable of evolution, also created something as fine and elegant as the head in Bologna.[67] Without going deeper into this difficult question but limiting ourselves to an analysis of the Parthenos type based on her copies and other related works it seems safe to conclude that the face of the Parthenos was of a heavy type with rounded, well defined chin.

The mouth in the copies is generally finely cut, of an undulating line, the lips full and usually slightly parted. In the Berlin head (No. 24) a row of teeth can be seen, but this detail does not appear in the other heads, and is not likely to have been a feature of the original.

The prevailing shape of the eyes is wide open. From Plato's rather superficial mention (*Hp. Mai.* p. 290 B, Overbeck 653) we know that they were inlaid in stone:

> . . . τοῦ οὖν ἕνεκα οὐ καὶ τὰ μέσα τῶν ὀφθαλμῶν ἐλεφάντινα εἰργάσατο, ἀλλὰ λίθινα, ὡς οἷόν τ' ἦν ὁμοιότητα τοῦ λίθου τῷ ἐλέφαντι ἐξευρών.

This has been taken to mean that the eyeballs were made not of ivory but of a stone whose colour was close to the colour of ivory, perhaps chalcedony.[68] The iris must have been inset in some other, darker, stone.[69] The eyelashes were probably made of a strip of metal, clipped and separately inserted, as was the common practice in contemporary sculpture. They most probably were of silver, blackened by oxidization (as suggested by an ivory head of Athena in the Vatican)[70] rather than of copper as in the Delphi Charioteer and frequently elsewhere. In our reconstruction we have inlaid the eyes in a darker stone and inserted the eyelashes in silver.

The hair is arranged in an essentially identical way in all the copies. Several, usually four, curls protrude from under the helmet in front of the ears at either side of the face. A low chignon in the back, bound by a ribbon, dissolves into four to six short screw-locks. A pair of tresses or locks is brought forward, in archaic fashion,[71] to fall over the aegis on each shoulder. These locks are in practically all the copies represented as lying flat on the aegis. In some cases the wave is richer or the number of individual strands

is greater, but their style is the same. The Hermitage gold medallions (No. 38), where the locks are of a thick cylindrical shape, are an exception. In his early publication of the medallions Kieseritzky expressed the opinion that this style, more appropriate for the metal technique, was used in the original.[72] This is doubtful, for the style of the locks, as we see them on the marble and other copies, does not seem to be more alien to the metal technique than are the cylindrical screw locks on the gold medallions. In the model we have followed the arrangement of hair as seen primarily on the Varvakion copy and the Aspasios gem (Figs. 71, 76).

b) Helmet

Pausanias (1.24.5; Overbeck 649) describes the helmet in the following way: μέσῳ μὲν οὖν ἐπίκειταί οἱ τῷ κράνει Σφιγγὸς εἰκών (. . .) καθ' ἑκάτερον δὲ τοῦ κράνους γρῦπές εἰσιν ἐπειργασμένοι. . .

"The helmet is surmounted in the middle by a figure of a sphinx . . . and on either side of the helmet are griffins wrought in relief. . . ."

The archaeological evidence gives us much more detailed information. On all the copies the helmet is of the Attic type, with the dome fitting the shape of the skull, a distinct neck-piece, and movable cheek-pieces. The latter are shown on the copies as turned up by means of a hinge, leaving the ear free. Three variants of the neck-piece of the helmet can be distinguished.[73] On one the neck-piece is set off sharply from the dome; it has straight edges and sharp corners, and extends far down the neck. The best examples are the Aspasios gem (No. 36) and the head in Berlin (No. 24) (Figs. 38, 16, 17). The second variant, best represented by the Hermitage medallions (No. 38, Fig. 42), the "new style" Athenian tetradrachms (Fig. 39), and the Cologne head (No. 27, Fig. 20) shows the neck-piece as an only slightly outturned lower edge of the helmet. The third variant, best seen on the head in the Louvre (No. 26, Fig. 19), falls between the former two: the neck-piece is set off as in the first, but it is not as long. The first variant, which we have followed in our reconstruction, is probably closest to the original: tectonically, it offers a stronger base to carry and balance the rich and heavy decoration of the upper part of the colossal helmet; artistically, it is preferable because its broader surface lends itself better to decoration which consisted, most probably, of a scale motif framed with a profiled edge, as represented by the Aspasios gem, the head in Berlin, and the tetradrachms. On other copies the neck-piece is either smooth (the decoration may have been painted in and is now lost), or it shows a scroll motif, as on the Hermitage medallions (Fig. 77).

The free space of the dome of the helmet was decorated with a stylized scroll ornament, as best seen on the heads in Cologne (No. 27, Fig. 20) and Paris (No. 26, Fig. 19), the Athenian tetradrachms (Fig. 39), the Aspasios gem (No. 36, Fig. 38), the Hermitage medallions (No. 38, Fig. 42), and particularly on the terracotta fragments in the Agora Museum (Nos. 49, 50, Figs. 48, 49). As suggested by our model, there is no doubt that, besides fulfilling a decorative purpose, the scroll ornament in the original also helped to break up the smooth and glaring surface of the large dome of the helmet.

Another detail worth noticing is the shape of the brow-band of the helmet. On most copies its lower edge follows the line of the eyebrows, forming a peak toward the root of the nose. The upper edge is usually curved with the peak reaching upward. An exception to this is the Hermitage medallions (No. 38) and the terracotta medallion in the Royal Ontario Museum (No. 58) where the lower edge is cut off straight. The beautiful small marble head of Athena from the Acropolis (No. 30), considered by Furtwängler to represent the last stage preceding the Parthenos type,[74] shows the same form of brow-band. It seems that this type was usual in the immediate pre-Phidian period,[75] while the doubly curved lower edge, almost invariably seen on the copies of the Parthenos, was particularly popular in the Phidian period suggesting, possibly, the γλαυκῶπις, "owl-eyed," appearance of the goddess. As on the Hermitage medallions, the Agora terracottas, and some other copies, the brow-band may have been ornamented with rosette or scroll patterns.

From the copies where the crests of the helmet are sufficiently preserved we can see that in the centre, worked in the round and supporting the plume, was a winged sphinx with female bust sitting on her hind legs, as on the Varvakion statuette (No. 2); that on either side of the sphinx were winged pegasoi, worked in very high relief, or practically in the round, with only a small part of their bodies attached to the background. The wings of the pegasoi were of the older, up-curved form which was conveniently used for attachment of the side plumes, as on the Varvakion copy and the Hermitage medallions. On actual helmets the plume was made either of horse hair, or of feathers, and was usually painted for effect.[76] It is unknown how it was rendered in the gold and ivory statue of the Parthenos, but we may

assume that, like the rest of the helmet, it too was chased in metal.

That the up-turned cheek-pieces were decorated with a winged griffin rampant in relief is very clearly shown on the Aspasios gem, the Hermitage medallions, and the Berlin head (Nos. 36, 38, 24). In Pausanias' description of the helmet (1.24.5) it is mentioned that "on either side of the helmet are griffins wrought in relief," but there is no mention of the pegasoi. The description is incomplete if not inaccurate. Pausanias' view from the cella floor may have been blocked by the cheek-pieces, and restricted by the semi-darkness of the cella.

In most of the copies the animals above the brow-band in front of the helmet are too damaged to allow a positive identification. They are completely omitted on the Varvakion statuette, but they can be seen on the Aspasios gem, the Hermitage medallions, the tetradrachms, and some other copies in minor arts, as well as, fragmentarily, on the heads in Berlin, Cologne, and Paris, and on the head of "Minerve au Collier" (Nos. 24, 27, 26, 19). In almost all of these copies the protomai, consisting of the breasts and the front legs of the animals, project freely above the brow-band. On the Hermitage medallions and the terracotta medallion in the Royal Ontario Museum (Nos. 38, 58) only the necks and the heads of the animals are included.

It seems that the protomai consisted of a series of alternating larger winged and smaller wingless animals, one of the winged type occupying the centre. It is generally agreed that the larger ones were winged pegasoi, while the smaller ones, with a pointed head and long ears, are taken as does.[77] Their number varies from copy to copy: the Berlin head shows remains of three large and two small animals, the Aspasios gem and the Cologne head, three large and four small, with a small one next to each up-turned cheek-piece. The "Minerve au Collier" shows remains of five large and six small animals which was probably the number on the original, since the next possible combination would give a total of 15 protomai, and this would make them too small and insignificant. The seven protomai we used in our reconstruction seem to fill the space adequately.

Attic helmets of the sixth and the fifth centuries B.C. were often very elaborate, as shown by representations on vase paintings and other works of art,[78] but the helmet Phidias gave the Warrior-Goddess is the most luxuriant we know. Indeed, to the modern eye it appears almost barbaric in the extreme richness of its decoration, with the crests and the cheek-pieces radiating from the face of the goddess.[79] But we must not judge it from a modern point of view. To the Greeks of the Phidian period the helmet of the Parthenos was more than a magnificent work of toreutic art; to them the fierce and exuberant decoration of the legendary and apotropaic beasts had a deeper religious and symbolic significance. Moreover, if their own "everyday" armour was decorated with motifs and symbols, and beautifully wrought, the helmet of the great Warrior-Goddess in the most grandiose of her statues should naturally in its decoration surpass any other.

For the rest of the details we have provided our model with those most commonly appearing on the copies. The dome is decorated with a stylized scroll ornament and the neck-piece with a scale pattern, both executed in very low relief. The brow-band is double-curved like that on the Varvakion and most other copies. The crests are treated as on the Varvakion copy. For the cheek-pieces with a griffin in relief we have followed the Hermitage medallions and particularly the Aspasios gem. Seven animal protomai, three larger pegasoi and four smaller deer, are placed above the brow-band. As we have seen, the number of protomai varies on the copies but some definitely show seven. The latter, as well as the cheek-pieces in our model, have been worked separately in metal and attached (Figs. 71, 76, 77).

c) Earrings and necklace

Most of the copies in minor works of art show that the goddess wore earrings and these were plainly of the so-called disc-and-pendant type. The disc covers the lobe of the ear; the pendant, roughly in the shape of an inverted pyramid, is suspended from it. This type of earring was very popular for about two hundred years from the sixth to the fourth century B.C. It is found on the sixth century François vase and,[80] among the later examples, on the fifth century coins from Syracuse and the fourth century terracotta antefixes from Tarentum.[81] Many actual examples are preserved in various museums.[82] The disc can be an elaborate multiple rosette, sometimes combined with filigree motifs. The inverted pyramid is usually composed of globules and twisted or plain wire. Sometimes it is decorated with rosettes and globule clusters. The pendant, as seen on the Hermitage medallions, is rather simple, but is essentially truer to the type than the one on the Aspasios gem, which is too cluster-like in appearance. All of the Athenian "new style" tetradrachms show the pendant earrings. Their shape varies slightly from issue to issue, and often is rather indistinct, but the disc-and-pendant type can clearly be seen on some of the

issues.[83] It is particularly well seen on the Paris gilded bronze medallions (No. 39, Fig. 43). In the original, the gold earrings, separately worked, were no doubt suspended from the pierced ivory ears following the common practice of the time by which details of sculptured figures, such as jewellery or weapons, were added separately in different materials.

We have in our reconstruction of the earrings, which Miss Hahn has made of gilded silver, followed the same general shape and type of decoration (filigree and granulation) as seen on the copies and on some South Italian Greek examples of the end of the fifth and the early fourth century B.C.[84]

Although only one of the copies in marble, the "Minerve au Collier" (No. 19), clearly exhibits a necklace, and in this it consists only of a single string of round beads, a more elaborate, double or triple necklace can be seen on most of the copies in minor arts. It is made up of an upper row of round beads from which one or two rows of pendants are suspended. A triple string can be seen particularly well on the Aspasios gem and the Hermitage and Toronto medallions (Nos. 36, 38, 58). On No. 38 the upper row of pendants consists of rosettes, and the lower one of buds or small clusters. A necklace, practically identical with the one on the Aspasios gem, is shown on a plastic lekythos in the shape of Athena's bust of the early fourth century B.C. in the British museum[85]: it is however described as "two necklaces the lower one with pendants." We may assume that the original statue had an elaborate necklace and that three rows of ornaments, whether in one or two necklaces, were most probably used.

In our reconstruction of the necklace we have retained the upper row of simple round beads, as seen on the "Minerve au Collier," the Aspasios gem and the gold medallions, suspending from this a row of rosettes, and for the third, lowest, row using a series of inverted lotus flowers alternating with acorn and lotus buds, on the model of a very similar necklace in the British Museum.[86] It is naturally impossible to be certain of the exact form of the necklace on the original statue but—as with other details—a certain freedom in reconstruction must be allowed always providing, of course, that the reconstruction is in accordance with the artistic and stylistic conceptions of the period.

C. ACCESSORIES

1. Nike

The Nike of the Parthenos is mentioned by several ancient writers.[87] We learn that it was "nearly 4 cubits (=6 feet) tall," that it was particularly worth admiration, and that it stood on the outstretched right hand of the goddess. She is also mentioned in some of the inscriptions from the Acropolis containing the inventory records of the treasures in the Parthenon. The reference in these however is only to a golden wreath described in some fifth century inscriptions as στέφανος χρυσοῦς ὃν ἡ Νίκη ἔχει whose weight is recorded as 70 drachmae,[88] while in others it is expressly mentioned as worn by the Nike, "unweighed":[89] στέφανος χρυσοῦς ὃν ἡ Νίκη ἔχει ἐπὶ τῆς κεφαλῆς ἡ ἐπὶ τῆς χειρὸς τοῦ ἀγάλματος τοῦ χρυσοῦ, ἄσταθμος.

The sources offer no closer description of her dress, her general attitude, or the distribution of gold and ivory on the figure. For a reconstruction the archaeological evidence is far more helpful.

The Nike, or the preserved parts of it, can be seen on the following copies: the Varvakion statuette (No. 2); the terracotta statuette from Switzerland (No. 42); statuette "A" in Exeter (No. 44); a silver coin of Nagidus, Cilicia (Fig. 40); some other coins with the full figure of Athena Parthenos;[90] a gem in the Metropolitan Museum (No. 37); a pair of the bronze wings of the Nike from the statue of Athena Parthenos at Priene (No. 22); a marble statue of Nike in the University of Pennsylvania Museum;[91] terracotta relief plaque of Athena Parthenos from Olynthus (No. 55); Attic marble relief in Berlin (No. 35).

The Varvakion statuette is the only marble copy in the round where the Nike is preserved. Wearing a long sleeveless chiton with a long girdled overfold, she has a costume very similar to that of Athena herself. In addition, however, she wears a himation which is bunched up in a thick fold, wound twice round her waist, and then swung over her left arm from which it falls in a heavy mass. Her knees are slightly bent. Her strong curved wings are lowered but not completely folded. As the visible left foot shows, she is raised on her toes with the body leaning slightly forward in the attitude of having just alighted on the palm of the goddess' hand. Although she faces obliquely to the right, being turned neither directly to the spectator in front nor to Athena, the conception of her pose is frontal. Her arms are bent at the elbows, the left at a right angle, the right at a wide angle, but her upper arms are only slightly detached from the body. With both her hands, it seems, she once carried the ribbon ends of a long open wreath or fillet: these ends, held in her hand, are still visible, though the rest is broken off. Lange, who published the Varvakion find shortly after its dis-

covery in 1880,[92] was able to find among the smaller fragments discovered with the statuette, a piece of the fillet which exactly joined a break on the left leg of the Nike. The drapery of the Varvakion Nike is treated simply and rather severely, the modelling of the body showing only where the peplos is blown against her legs. The original polychromy of the little copy still shows traces of yellow along the edges of the chiton, and of brown-black on the feathers of the wings.

Dorothy B. Thompson, in an attempt to reconstruct the golden Nikai from the Acropolis,[93] considers the Nike of the Parthenos, as seen on the Varvakion copy, to have been the prototype for a group of these Nikai which were dedicated about 434 B.C. and before 425 B.C. A series of several Roman copies of Nikai, three of them in Berlin, one in Paris, all of them life size or just under, have usually been considered very close to the Phidian type:[94] they show the Nike floating, in a rather rigid descending flight, with the drapery of the chiton clinging to the front of the legs; over it, the himation, folded horizontally and wound round the waist, is drawn over the left arm from which it falls in a heavy mass (Fig. 78). The Varvakion Nike, which we have followed in our reconstruction, is less rigid in both the pose and the drapery. Common to them all is a band arranged crosswise over the upper body to hold the chiton firmly in place while in swift motion.

The Nike in the University of Pennsylvania Museum, said to have come from Cyrene and considered by R. Carpenter to be a full size copy of the Parthenos Nike, essentially corresponds with the Varvakion Nike, disregarding some differences in the costume, namely the addition of an aegis with the gorgoneion and the omission of the rolled-up himation. It is worth mentioning that unlike the latter, both arms, now missing, of the Philadelphia Nike, were completely free and detached from the body. Carpenter says that it is not clear "what the Varvakion Nike is supposed to be holding in her hands or doing with them" whereas the Philadelphia Nike, judging by the way the arms were broken off at the shoulders, and by the two small spots of corroded iron on the left breast and the right thigh, held "a wreath, or fillet, or streamer or similar object extended in both hands, as though in the act of crowning or adorning someone." Although this attitude, according to Carpenter, does not agree with the Varvakion Nike, it finds its confirmation in some other representations of the Parthenos Nike, such as the coin of Cilicia. However, Prof. Carpenter has apparently failed to notice that the earliest publication of the Varvakion copy by Lange, as already mentioned, made it perfectly clear that the Nike was holding an open wreath in her hands. Whether the upper arms of the original Nike were entirely free from the body as on the Philadelphia Nike, or were partially or completely attached, as on the Varvakion and the Berlin Nikai, it is difficult to say, but it is more likely that they were entirely free since in the original different materials were used for the arms, which were ivory, and for the adjoining drapery of the chiton, which was gold.

It may be added that the round wreaths carried in the right hand of the Berlin Nikai, together with a large portion of both arms, are in every case a modern restoration. However, the ancient remains of the arms indicate their original position, which was similar to that of the Varvakion Nike and which suggests that originally they too may well have carried an open wreath or fillet such as is seen on the coin from Cilicia (Fig. 40). The Roman gem in the Metropolitan Museum (No. 37) shows a round wreath but its testimony is weak because of other deviations, such as the Corinthian type of helmet, and the lack of the serpent and the column.

The inscriptions from the Acropolis tell us that the Nike wore a golden wreath on her head.[95] Its weight is recorded as 70 drachmae.[96] It was composed of leaves some of which became detached about 400 B.C. and were inventoried separately until 316 B.C.[97] After that time the wreath was probably repaired because it is again mentioned as a whole, but as ἄσταθμος (unweighed): possibly after the repair it was thought too delicate to be removed again for weighing.[98]

Except for the gold wreath we do not know exactly how the gold and ivory were used for the rest of the statue. Gerkan has shown that the 44 talents of gold used for the entire cult image would have allowed the drapery of the Nike to be made of gold plates, but it would not have sufficed for the rest of the accessories which therefore were probably only of gilded bronze: the thickness of the drapery of both Athena and Nike would have been about 0.57 mm, sufficient to stand handling without suffering injury. Quite possibly gold was also used for the open wreath in her hands. The large wings were probably of gilded bronze chased over a wooden core. The face, hands, and feet would have been ivory, on the analogy of the figure of Athena. Likewise it is assumed the inner construction of the Nike consisted of a wooden core to which the gold plates were attached. A wrought iron bar must have run through

the statue and connected it to the arm of Athena. Stevens convincingly estimates the entire weight of the Nike, including the iron bar connecting the Nike with the arm of Athena, the interior wooden core, and the gold plates, at 110 kg, or 242 lb.[99]

The position of the Nike, as seen on the copies in the round in which she is preserved, was such as to make the angle at which she was turned away from Athena and toward the spectator about 45°. Had she directly faced Athena, her back would have been turned toward the spectator, and vice versa. Placed in full profile she might have produced an impression of flying away between Athena and the spectator. Neither of these solutions would have been satisfactory, and it is obvious that the position seen on the three-dimensional copies is the best logically and aesthetically. It is true that on the coins and on the Metropolitan Museum gem the Nike is turned in profile toward Athena, but a three-quarter view in the round translated into a relief representation on such a very small scale would most likely be executed as pure profile.

Summing up, we can imagine the Nike of the Parthenos as a floating figure in the moment of alighting on her toes on the hand of Athena (Fig. 79). She has lowered her wings but has not yet folded them completely. The golden drapery of her Doric chiton is blown against the lower part of her legs. She wears a golden wreath on her head, and in her hands she carries an open wreath or fillet. The "plot," as interpreted by Lethaby,[100] is that Athena has set down her shield and leaned her spear against her shoulder to accept a figure of Nike as a thank-offering from her people. He says that "the image of Nike has been taken from its stele and in its place Athena rests her arm, accepting at once the figure and the pillar." We suggest that perhaps there is another better interpretation: the Nike has just alighted on Athena's hand, as proved by the sweep of her drapery and the position on raised toes. She has actually "flown on to Athena's hand like a tame bird," a supposition not so absurd as Lethaby would have it. She has, on Athena's orders, come down to crown the city of Athens for its glorious victories over the Persians. The whole statue is thus not only a thanksgiving to Athena who has brought victory to her city, but also a glorification of the city herself which for its valiance in battle has deserved to receive Victory at the hands of her Patron-Goddess.

2. Column

No ancient literary source mentions a support under the Nike.[101] With the discovery of the Varvakion statuette, which is considered to be the most complete and the most accurate reflection of the original, the possible existence of a column under the Nike on the original has become apparent although none of the other marble copies in the round shows it. The closest approach to one, in my opinion, is on the recently discovered statue from Gortyn, Crete (No. 15). The right thigh of this figure shows traces where a support or a brace may have been attached. Levi believes that it braced the column in the same way as the two other "puntelli," visible on the left side, supported the shield.[102] Unfortunately the arms are missing from the elbow down, and the base is broken off all around the statue.

A support under the right hand, however, is shown on some copies in relief and in minor arts. They are: (1) Attic marble relief in Berlin (No. 35) of the first half of the fourth century B.C., with a support in the shape of a column; (2) a silver coin from Cilicia, about 375 B.C.: on it the column is replaced by a tree-stump. Otherwise the statue corresponds to the Varvakion statuette. These coins are the oldest examples of coinage where a copy of a famous work of art can with certainty be recognized. Lermann, p. 78; W. B. Dinsmoor, "The Repair of the Athena Parthenos," *AJA* 38 (1934) 103-104, fig. 4[103] (Fig. 40); (3) a bronze coin from Priene, of Valerianus. As on the preceding coin the column has been replaced by a tree trunk with lopped branches. *BMCat. Coins Ionia*, 235, pl. 24, 13 (Fig. 41). This coin reproduces the colossal statue of Athena Polias in the temple of Priene of which only some marble and gilt bronze fragments have been preserved (No. 22); (4) an Attic lead token: the support here is a true, though rather indeterminate, column, and not a tree trunk. Jahn-Michaelis, *Arx Athenarum a Pausanias descripta* (Bonn 1901) pl. xxxv, No. 6 (see List of Copies, under Coins and Tokens); (5) terracotta statuette in Switzerland (No. 42). Although crudely executed, the shape of the column corresponds exactly to the one on the Varvakion copy. Deonna, *REA* 21 (1919) 20-26, pl. 1, does not doubt the authenticity of the statuette. Rumpf, *Deutsche Literatur Zeitung* 4 (1932) 117, recognizes its importance for the evidence of the column; (6) terracotta statuette "A" in Exeter, very close to the preceding (No. 44). The two latter are so far the only other three-dimensional copies, in addition to the Varvakion, which show the column.

The existence of a columnar support in the original is, as can be seen, based on comparatively scanty evidence, and has therefore been refuted by some scholars, such as Schreiber, J. E. Harrison and, more

recently, by Gisela Richter.[104] The main argument against its existence in the original is that, from an aesthetic point of view, the column is ugly, clumsy, and obtrusive. Schreiber argues that supports were not used in the best periods of Greek art, the Archaic and the Classical, when only as much was attempted as the material would allow. The armature of the statue could have been made strong enough, he claims, to hold a wooden Nike covered with a thin layer of gold and ivory. He concedes, however, that the column may have been added later for purely static reasons after certain technical difficulties had become apparent. Dinsmoor accepts the column much more readily, saying that "if not part of the original design it is at least as early as the beginning of the fourth century," and therefore either employed "by Phidias or one of his followers."[105]

But there is truly no valid reason for not accepting the column as a part of the original design, and its original existence has in fact been almost generally accepted.[106] From the aesthetic point of view the column was necessary to counterbalance the rather crowded left (spectator's right) side of the statue where the shield, the spear, and the serpent rested on the base. If the statue was to have dignity, as Stevens has observed,[107] particular attention had to be paid to a harmonious distribution of its accessories. He has noted that the column, when seen from the main entrance, made the centre of gravity of the statue as a whole, including the shield on its left side, coincide with the axis of the cella. With the column and the Nike on one side, and the shield and the serpent on the other, the statue presented a strong and balanced design worthy of such a great image.

At the same time a support was imperative for functional reasons of stability, since the weight of the arm and the Nike was too great to be carried only by the internal armature. Stevens estimates the arm alone at 210 kg (462 lb.), of which 187 kg is assigned to the heavy interior construction consisting of a wooden core and an armature in the form of a wrought-iron bar. Adding the Nike (110 kg or 242 lb., see p. 36) the total weight of 320 kg would have required, if there was no external support in the form of a pillar or column under the hand, the four or five metre long wrought-iron bar to be about eight centimetres square in cross-section. Such a bar, however, Stevens says, would have been very difficult to forge by hand in the fifth century B.C. Even if it could have been made, strains, produced by any bending and torsion in the armature, might have easily deformed the statue.

Furthermore, there is evidence that supports of various kinds were cleverly used in other gold and ivory statues. In Olympia, the arm of Zeus carrying the Nike was supported on the arm-rest of the throne, as seen on the coins of Elis of the Hadrianic period. The coins of Epidaurus suggest that the snake was a disguised support for the outstretched hand of Asclepius.[108] That there was a support in the Parthenos is also strongly suggested by its presence in the terracotta statuettes from Switzerland and Exeter (Nos. 42, 44). For in view of their small size, heavy proportions, and the fact that the hand carrying the Nike, and the Nike herself, are hardly detached from the figure, the column in these statuettes has no *raison d'être*. The same is true for the copies in relief (coins, tokens, and the Attic marble relief), some of them dating from the fourth century B.C., where of course there is no weight bearing on the column.

It may be argued that the existence of a column in a copy made of marble, such as the Varvakion, was a technical necessity and proves nothing about its presence in the original. However, in the case of the Varvakion in particular, any current type of support could have been used and it is very difficult to imagine that the Hadrianic copyist could by sheer chance have produced the kind of column he did, so different from any order of his own time, had he not seen it on the original.[109]

Those who deny the possibility of a column for aesthetic reasons should remember that, while a supporting pillar under the Nike may seem ugly or unusual to the modern eye, the Greeks were accustomed to seeing statues mounted on high pedestals in the form of columns. Dedicatory statues, particularly those of the Korai, and the statues of the Nikai, had been set up on columns in Aegina, Delphi, and on the Acropolis ever since the beginning of the sixth century B.C.[110] If these columns, approximating in their shape the Doric and the Ionic orders and reaching to the eye-level or just above it, were in accord with the aesthetic sense of the Greeks, it may be supposed that a column supporting the Nike in the composition of the Parthenos was likewise acceptable. Phidias, of course, made adroit use of a functional necessity, but to the Greeks such a support was a matter of course, something so taken for granted that they did not consider it sufficiently important or noteworthy to mention in descriptions or to reproduce in copies, though the latter, particularly the marbles, are as a rule poorly preserved in that detail and may well have had the column before the damage and mutilation took place.

If we accept the column as a part of the original

design, as we have done, a closer analysis of it on the Varvakion copy produces interesting results.[111] The base of the column, with its clearly discernible convex and concave mouldings (*tori* and *scotia*), is very close to the Attic variety of the Ionic base, used in the Propylaea and the Erechtheum. Immediately above the base the column shaft diminishes somewhat in diameter and returns to its full diameter again just below the capital. The slight entasis culminates a little below the middle of the column. The capital consists of the following: a small *torus* at the bottom; a lower calathus of a rather cylindrical form with a *torus*-like upper end; an upper, more conical, calathus terminating at the top in a flat fillet; and a strong, square abacus at the top.

Lange, analyzing the then newly found Varvakion copy, was the first to observe that the capital was an "Abkürzung," a simplified version, of the Corinthian capital which in the original must have been decorated with leaves in metal.[112] The Varvakion capital indeed, both in its basic construction and in its outline, lends itself readily to the application of the decorative elements of a Corinthian capital, the acanthus leaves in the lower calathus, the volutes and the palmettes in the upper, as we have very clearly seen in the course of making our three-dimensional reconstruction (Figs. 79, 80). The elegant column thus obtained puts quite a different light on the problem of the existence of a support, and one cannot help but feel that much of the reluctance to accept a support has been due to the bare ugliness of the Varvakion column. As restored in our model with the decorative features of the Corinthian order, the Varvakion column presents a very pleasing effect. It moreover exhibits close similarities in its capital as well as in its general proportions to the somewhat later Corinthian column in the temple of Apollo at Bassae, which is the first known use of that order in architecture. The similarity would be all the stronger if we allow for painted detail on the Varvakion capital.[113] The inventor of the Corinthian capital, as reported by Vitruvius (4.1.9), was Callimachus, a coworker and pupil of Phidias. The theory of Lange has been vigorously revived, and rightly, we feel, during the last two or three decades, namely that the Parthenos column was actually the first manifestation of the so-called Corinthian order.[114]

The question may be raised why it was felt necessary to invent a new type of capital. If we consider the problem for a moment it will perhaps not be difficult to discover a reason. In the first place a column of the Doric order would not have been appropriate since the heavy proportions of both shaft and capital would have been out of keeping with the statue. Also the difference in scale between it and the nearby cella columns would have been harsh and disturbing. The slender Ionic column was more suitable for the purpose but since its capital was designed to be seen primarily from two faces its appearance would have been unsatisfactory when used in an isolated free-standing column such as this. By modifying the Ionic capital so that it should look well from any point of view Callimachus developed what came to be known as the "Corinthian" capital (and column). We may note incidentally that Ictinus, the architect of the Parthenon, a few years later encountered a similar difficulty in his design of the single free-standing column dividing the two parts of the northern cella of the temple of Apollo at Bassae, a difficulty which he solved by the device successfully employed for the Parthenos, namely by the use of a Corinthian capital. However, since the Corinthian capital is not a form natural to stone, but to metal, it must have been invented for use in connection with some monument where metal, not stone was employed, therefore not for an architectural purpose. What other known monument of this period is so appropriate as Athena Parthenos?

The number of the acanthus leaves in the lower zone of the capital was determined to some extent by their height: on the comparable Bassae capital, where the acanthus zone was particularly low,[115] the width of the leaves was proportionally smaller, and 20 of them, corresponding to the number of the flutes in the shaft, were accommodated at the base of the calathus. On the Parthenos capital, on the other hand, where the acanthus zone is comparatively higher, as indicated by the Varvakion capital, the leaves must have been proportionately wider at the bottom, and consequently their number must have been fewer. In the ROM reconstruction 16 leaves have been used, and their width seems well proportioned to their height. In the later, fully developed Corinthian capitals with high-reaching leaves, the number of leaves could be reduced to as little as eight.

The height of the Parthenos column in relation to the height of the statue was roughly 1:2, as on the Varvakion statuette.[116] As for the absolute height of the column, it varies somewhat depending on the various estimates of the total height of the original statue but about 5 m is a close estimate.

Ever since Lange it has been generally assumed by the adherents of the pro-column view that on the Parthenos capital the decorative elements were wrought in gold. In view of the latest calculations,

however, which do not allow gold for the accessories, we should assume that some other metal, most probably gilded bronze, was used for the capital. In either case, the capital was made of metal, *ergo* was a work of toreutic art, and this must have greatly influenced its form, allowing the vegetable motifs to be freer and more detached as compared to the first attempt in marble at Bassae where the forms were more restrained and timid due to the more difficult-to-work material. It has been ingeniously explained that the die-engraver of the coin of Cilicia (Fig. 40), vaguely remembering this minor detail of the statue as "leafy" in general effect, supplied his statue with a tree-stump to support the Nike.[117]

A more recent theory, expressed by Stevens,[118] is that the original Phidian design for the support was an olive tree which was replaced by a column in Roman times after the great fire which destroyed the original statue. This theory is based, in my opinion, on rather weak archaeological evidence: one can argue that, if the coin of Aphrodisias of about 375 B.C. showed the tree which, supposedly, reflects the original, the tree would not likely still be shown on the coin of Priene from the time of Valerianus, 254-260 A.D. (Fig. 41) when it had been replaced by a column on the original at least as early, according to Stevens, as the time of Hadrian. Moreover, a branching olive tree as a support under the hand is from an aesthetic point of view quite unsatisfactory. A column, on the other hand, would blend into its architectural surroundings.

Being surrounded by the fluted Doric columns of the cella the column of the Parthenos was most probably itself fluted, possibly with 20 flutes, as on some other early Corinthian examples (Bassae, Delphi, Tegea, Olympia), still retaining the traditional Doric number. The original shaft of the column was most probably faced with pieces of ivory which were worked so as to form the fluting. These pieces were perhaps bound with gold rings. In his detailed discussion of the Parthenos column Wotschitzky ascribes the lack of flutes on the Varvakion copy to a deterioration, through theft or otherwise, by which the original shaft of the Parthenos was stripped of its outer, finished layer.[119] Subsequently, the Roman coypist reproduced only what he saw, that is a round column with most of the shaft between the base and the capital slightly reduced in diameter, a reduction caused by the removal of the surface layer of ivory. Similarly, the capital had been denuded of its decoration, and this was the state in which it was seen by the Roman copyist. This would account for the unusual shape of the Varvakion capital which is obviously only the "wooden core" of the original capital: the Roman copyist, seeing a column unlike any other column known to him, reproduced it faithfully.[120]

There are, in my opinion, two points against this explanation. The first is that, in view of what we have seen concerning the distribution of gold on the statue, I doubt that the decoration of the column was gold. It is much more probable that it was gilded bronze like the rest of the accessories.[121] Lachares, who is reported to have stripped the statue of its gold shortly after 300 B.C.,[122] must have known this. Even bronze might have been desirable, of course, but in comparison with the shield or the serpent, the quantity used for the decoration of the column must have been negligible, and the serpent or the shield would have been pilfered instead. This would suggest that, if the decoration of the column was bronze, it was quite likely still intact when the Varvakion copy was made. If, on the other hand, we assume that it was gold, and that it was looted by Lachares in 295 B.C., it is rather difficult to believe that the Greeks would have done nothing about it in the intervening centuries: the unattractive core could have easily been concealed, even if only with an inferior metal.

It would seem perfectly natural to assume that the Varvakion copyist purposely omitted to work out in detail the decoration of the column, preferring to render it in a simplified form for the same reasons that he omitted or simplified other details. For example, on the shield he copied the gorgoneion but omitted the rest of the reliefs; and on the base he copied the mouldings—also in a simplified form—but omitted the frieze with figures; and on the helmet he entirely omitted the animal protomai. This tendency toward simplification is not surprising if we allow for the small size of the Varvakion copy and for the diminutive scale of its various parts. The total height of the Varvakion capital, including the abacus, is only 7.6 cm, of the lower calathus 2.5 cm, of the upper 2.9 cm. Instead of trying to copy, at such a small scale, the column and the rest of the accessories as he saw them, the copyist preferred to simplify them either by omitting some parts of their decoration entirely (as in the case of the shield and the base), or by modifying them (as in the case of the column). This he did not only because it was almost impossible to reproduce the minute details in marble, but also because on such a small scale they would have resulted in a very unsatisfactory, niggling effect. By simplifying them instead the copyist endowed his statuette with an almost monumental dignity and produced a copy which, in spite of its shortcomings, can be

considered the most valuable one of all in conveying to us some conception of the lost original.

Our observations on the column can be summed up as follows: the column was a part of the original Phidian design, necessary for both aesthetic and functional reasons. The Varvakion copy helps us to reconstruct the original column of the Corinthian order, the archetypal example. Its vegetable decoration was particularly well suited to the metal technique of the original. The lack of the relief decoration on the Varvakion column can be attributed to the copyist's desire to simplify the small marble copy though the vegetable motifs of the capital may have been painted on, as we know were some other details on the Varvakion copy.

3. Owl

Dio Chrysostom, a competent writer of the second half of the first and the early second century A.D., in his *Orationes* (12.6) says the following:

> . . . τῇ Ἀθηνᾷ λέγεται προσφιλὲς εἶναι τὸ ὄρνεον, τῇ καλλίστῃ τῶν θεῶν καὶ σοφωτάτῃ, καὶ τῆς γε Φειδίου τέχνης παρ' Ἀθηναίοις ἔτυχεν, οὐκ ἀπαξιώσαντος αὐτὴ συγκαθιδρῦσαι τῇ θεῷ συνδοκοῦν τῷ δήμῳ. Περικλέα δὲ καὶ αὐτὸν λαθὼν ἐποίησεν, ὥς φασιν, ἐπὶ τῆς ἀσπίδος.

"It is said that the bird was especially dear to Athena, the most beautiful and the wisest of the goddesses, and it became part of Phidias' art among the Athenians: he did not find it unworthy to set it up together with the goddess, and the people agreed. But Pericles and himself, as is said, he hiddenly made on the shield."

In Overbeck the passage has been separated, with the last sentence listed under No. 668 among the sources referring to the shield of Athena Parthenos, and the first long sentence appearing later (under No. 677) with two other references (Nos. 678, 679) mentioning an owl on the Acropolis. While these do not at all make clear that the owl they mention has anything to do with the Parthenos, Dio's full passage more likely seems to do so, referring in one breath, so to speak, to the owl and to the shield of the Parthenos. This has been interpreted to mean that a figure of an owl in the round was included as one of the attributes in the statue of the Parthenos.[123]

The question is, where in the statue could the owl have been located. On the basis of the Hermitage medallions (No. 38), which until recently were the only archaeological evidence for the owl, some, and most recently Fink, have maintained that the bird was perched on the left cheek-piece of the goddess.[124] The validity of the medallions' testimony has been questioned on the grounds that the owl was an insertion of the goldsmith to fill the blank space of the tondo to the right of the head, and that in reality an owl on the upturned cheek-piece would be aesthetically unacceptable. Besides, such a playful positioning of the bird would be contrary to the solemn dignity of the great statue.[125]

Recently two more monuments transmitting the owl have come to light though not necessarily shedding any on the question. One is a terracotta medallion with traces of gilding, at the Royal Ontario Museum (No. 58), and the other, a marble statuette of the Parthenos (No. 13).[126] If anything, these two new pieces of evidence contradict each other, and the Hermitage medallions as well. On the terracotta medallion (No. 58) the owl sits on the right cheek-piece of the goddess (spectator's left) while in the statuette the perky little bird is placed on the base near her right foot. The testimony of the terracotta medallion is of doubtful validity because it obviously was once heavily gilded in imitation of metalwork, in which case the bird might have been added for the same reason as on the gold Hermitage medallions, that is to fill and break up the blank shiny surface. Besides, the tiny Victory holding a fillet on either side below the ear proves that the craftsman-copyist deliberately introduced some features nonexistent, or existing differently, in the original which it otherwise carefully reproduces.

The owl standing on the base of the marble copy in Rome does not necessarily mean that it so stood in the original. The statuette was copied in the second century A.D. or later from a rather free Hellenistic version of the Parthenos, and though there is no doubt that it is the Parthenos it reproduces, it differs from it in various details: it lacks, for instance, the characteristic fold falling from the left knee, and it also differs in the shape of the aegis and the arrangement of its snakes, as well as in the high Hellenistic style of girdle. The owl, as an unmistakeable "trademark" of Athena, may have been added by the late copyist as a reminder that this indeed was Athena Parthenos. This suggestion gains weight if one recalls that in the Gallo-Roman terracotta from Geneva (No. 42) and in the terracotta medallion from the Agora (No. 50) an identifying inscription with the name of Athena was added. Herbig nevertheless accepts the owl as a part of the original statue though he admits that its exact situation remains uncertain.

The evidence, so inconsistent on this detail, does not, in my opinion, warrant an inclusion of the owl

in a reconstruction of the statue. Even if we accept Dio's words that the owl was *erected together with Athena* (συγκαθυδρῦσαι) as meaning that it was incorporated in the Parthenos (an interpretation not entirely convincing), it is difficult to imagine that it was placed perching on one of the upturned cheek-pieces of the helmet as the Hermitage and the Toronto medallions would have it. There is certainly no trace of it on a number of other copies where it likely would have been shown had it been there, the first and the foremost among them the Varvakion statuette. It does not seem possible that the majestic composition of the helmet with its three crests and the cheek-pieces radiating from the head of the goddess would be thrown off balance, so to speak, by the addition of an owl. Moreover, to be well discernible at that height, its size would have had to be considerable, something in order of about 0.80 m, and probably larger than the cheek-piece itself, presenting the sculptor with great technical and static difficulties. It certainly was impossible to extend an aegis snake from the shoulder so high as to make it a support for the weighted cheek-piece, as it seems to be shown by the Hermitage medallions. Besides, if the owl was on the same side as the spear, as on these medallions, the long spear running obliquely from the outside of the left foot of the goddess through a coil of a snake on her left shoulder (a well attested and trustworthy detail) approaches the left side of the helmet too closely for an owl to be harmoniously and without crowding incorporated into the design in that part of the statue.

If, with Herbig, we consider the possibility that the owl was placed on the base, where exactly could it have stood? Let us assume, first, that it was somewhere to the left, from the viewer's point of view, of the column which, as is almost generally agreed, was an original feature of the Parthenos design. Though technically it could have been placed between the column and the left edge of the base, aesthetically it would, at this spot, present a disturbing element, a detail breaking the harmony of the entire composition in which the components of the statue, the shield on one side and the column on the other, rise from the base to be joined, by her hands, to the goddess in the middle. If at all, the owl may have possibly stood between the column and the right foot of the goddess being thus included within the closed compositional scheme of the image. However, with no other evidence for it there, beside the one provided by the Rome statuette, it has seemed wiser not to include it in the reconstruction.

4. Shield

a) Exterior

Judging by the numerous references and descriptions in the texts the elaborate shield of the goddess, mentioned more often than any other single part of the statue, provoked a special interest in ancient observers. Pliny (*NH* 36.18, Overbeck 661) is the most informative so far as the general appearance of it is concerned:

> . . . neque ad hoc Iovis Olympii pulchritudine utemur, non Minervae Athenis factae amplitudine, cum sit ea cubitorum viginti sex,—ebore haec et auro constat,—sed in scuto eius Amazonum proelium caelavit intumescente ambitu parmae, eiusdem concava parte deorum et Gigantum dimicationes, in soleis vero Lapitharum et Centaurorum, adeo momenta omnia capacia artis illi fuere. . . .

From the passage we learn that on the convex side of the shield, "intumescente ambitu parmae," Phidias had chased, "caelavit," the battle of the Amazons, and on the concave side the battle of the gods and the giants, and that "adeo momenta omnia capacia artis illi fuere," he was equally skilled in all aspects of art, meaning that his art was excellent not only as far as the colossal statue was concerned but also in representations on smaller scale. Pausanias (1.17.2, Overbeck 667) briefly mentions that the Amazonomachy was wrought on the shield of Athena and on the pedestal of Zeus at Olympia.

Some of the reports (Overbeck 668-674) centre their interest on the likenesses of Phidias and Pericles which, they say, Phidias had included in the shield. Plutarch in the passage quoted in Testimonia, p. 1 (Per. 31; Overbeck 630) tells us that Phidias showed himself as a bald-headed old man lifting up a stone with both hands, and that he made a beautiful image of Pericles in combat with an Amazon: the position of his arm, holding a spear in front of his face, was given him cleverly in order to conceal the likeness which appeared to either side. Ampelius (*Lib. mem.* 8, Overbeck 672) says that the shield, which the goddess touches with her finger, is to her left, and that in the middle of the shield, "clipeo medio," there is an image of Daedalus, the legendary craftsman, corresponding, no doubt, to the image of Phidias in all other reports.

A puzzling bit of information in some of the authors, and one that obviously intrigued them, is that Phidias' image on the shield was by some cunning device connected with the statue in such a way that if someone tried to remove the image, the whole

statue would fall apart and perish (Overbeck 669-673). The earliest and the least fanciful is a reference in Cicero (*Orat.* 71, 234):

> Sed si quos magis delectant soluta, sequantur ea sane, modo sic, ut, si quis Phidiae clipeum dissolverit, collocationis universam speciem sustulerit, non singulorum operum venustatem.

"If, however, anyone likes a loose style let him by all means use it, but in a manner of one who should take apart the shield of Phidias: if any one ever takes it apart, he destroys the beauty of the composition, but not the charm of the several pieces."[127] The rest of these references are from the first and second centuries A.D., including also Περὶ κόσμου, a pseudo-Aristotelian work written most probably in the first century A.D. (Overbeck 669).[128] Could it be, one is tempted to suggest, that Cicero's picturesque comparison with the shield in discussing the rhetorical style was too literally interpreted—or misinterpreted—by overimaginative contemporary and later Latin writers?

Not only in antiquity was the shield of the Parthenos an object of special interest and speculation. Modern archaeologists and historians of ancient art have tried in particular to reconstruct the rich composition of the Amazonomachy on the exterior of the shield believing, rightly, that in this complex relief with its many figures in free and vigorous motion the art of Phidias, as we know it from the architectural sculpture of the Parthenon, would be more truly reflected than in the colossal gold and ivory image of the Parthenos herself.

Among the most important earlier studies of the shield are those by Schrader and particularly by Susanne Ras. More recent are the discussions by Becatti and von Bothmer. Reconstructions in line drawing have been proposed by Brommer, Barbara Schlörb, Jeppesen, Evelyn Harrison, and, most recently, by Strocka.[129] Our own reconstruction, first published briefly in 1963,[130] has been on display in the Athens Gallery at the Royal Ontario Museum since 1962. Chronologically earlier than all the other reconstructions except that by Brommer, it is the only one modelled in relief.[131]

Since the sources say almost nothing about the composition of the figures in the Amazonomachy, for a reconstruction we have to turn to the archaeological evidence echoing the shield. This consists of the following:

L: the shield of the Lenormant statuette (No. 1, Fig. 23)
S: the Strangford shield (No. 31, Figs. 26, 27)
V: fragment in the Vatican (No. 32, Fig. 28)
C: fragment belonging to the Conservatori torso (No. 7, Fig. 25)
P: the shield of the Patras statuette (No. 6, Fig. 24)
A: terracotta fragment from the Agora (No. 51, Fig. 50)
B: fragment in Boston (No. 33, Fig. 29)
Reliefs from the Piraeus (No. 34, Figs. 30-36)[132]

Except for the Piraeus reliefs in which the figures are estimated to approximate the scale of the original (0.70-0.80 m), all the copies are very much reduced in size. All except L are fragmentary, S being the most nearly complete. L, though completely preserved, is of miniature size (diam. without the rim, 0.12 m), transmitting an extremely reduced number of figures, very sketchily worked. The Piraeus reliefs, varying in their preservation from good to extremely fragmentary, present only excerpts from the complex circular composition of the shield containing usually, if not in every case, only a single pair of a Greek and an Amazon in combat, being thus more useful for detail than for the whole. A reconstruction of the original composition is made difficult both because the "copies" show an arbitrary selection of figures, frequently in a changed location as well, and because due to their poor workmanship and sketchiness the corresponding figures are often difficult to identify. It is natural then that modern reconstructions should differ on many points and, as archaeological evidence stands at present, any proposed reconstruction is to a certain extent a matter of speculation. One principle, however, that should be particularly observed, is the distinct stylistic features typical of the period of Phidias, and in this respect some of the reconstructions appear preferable to others.

It can be perceived from the copies that the general scheme of the action, representing, it is believed, the legendary storming of the Acropolis on the part of the Amazons,[133] consists of two main parts, an upper and a lower. In the upper, following the action anti-clockwise, we can see the Amazons advancing, attacking, and ascending the steep hill toward the centre top which is occupied by a group of the defending Greeks. There the Amazons' attack is successfully met by the Greeks, and left of centre the invaders are depicted in a precarious situation, fallen, or wounded by their victorious opponents. The lower part shows a complete defeat of the Amazons: here again from a central group of victorious Greeks, there is a movement of dispersion and escape toward the edges. The supine body of a dead or dying

Amazon along the centre bottom sums up their ultimate defeat.

The scene takes place on the rocky hillside with the action disposed on various groundlines. The fact that the ground is not represented on the copies of the whole shield must surely be attributed to their exceedingly reduced size resulting necessarily in a very simplified representation. On the Piraeus reliefs, on the other hand, which are estimated to be on about the same scale as the original, the ground is always represented. Though it has been argued that this is a deliberate addition of the copyist conforming to the taste of the neo-classical period in which these reliefs were made,[134] the representation of the terrain is certainly not uncommon in the time of Phidias as shown by the many contemporary vase paintings and by the rocks on the Parthenon frieze itself, to go no further. In the course of the modelling of our three-dimensional reconstruction we have discovered that an indication of the terrain makes the attitude of the individual figures on the copies more easily understood. It also helps to draw together the entire multi-figured relief which, one must remember, was composed within an extremely difficult circular space, a bold and novel feat in the art of the fifth century, and one whose great challenge could only be met by a great master. It is unlikely that the relief figures—for that they were in relief there is no doubt—were made to float, as it were, on a completely smooth background without groundlines to give them substance, and to relate them to each other. From a purely aesthetic point of view, the representation of a rough ground in the colossal original relief would help to break up the expanse of an otherwise smooth and glaring metal surface surrounding the figures.[135]

It is generally agreed, and there can be no doubt on the point, that the composition consisted of individual duels or pairs of combatants. For some of these there is no difficulty as to their pairing or to their placing in the circular space since they appear in an identical, or almost identical, situation on two, three, and in some cases even four copies. The difference in location is sometimes only slight but for some figures, when compared in various copies, it is quite considerable. Our identification of the figures as they appear on the six most important copies of the shield (L, S, V, C, P, A) is shown on Fig. 81; Fig. 82 shows our resulting reconstruction modelled in relief, and Fig. 83 gives a synopsis of all the recent reconstructions (Brommer, Schlörb, Jeppesen, Harrison, Strocka, and ours).[136]

The original composition is, as a rule, more certain where an identical location of the figures is confirmed by more than one copy. Such, for instance, is the pair of the Greek (3) pursuing an Amazon (4) who is falling or jumping off a cliff while he is pulling at her hair. This group, nicknamed the Hair-pulling group, placed in the lower right quadrant of the shield, can be seen in a practically identical location on four of the copies (L, S, P, A). With a slight variation in pose and background it is also found on two of the Piraeus reliefs, and, very fragmentarily, on a third one as well, its popularity probably being due to its particularly dramatic effect (Fig. 31).[137] Also well attested is the group of the Greek in a Corinthian helmet (7) pursuing an Amazon retreating uphill from him (8): S and P show them identically on the right side of the shield. The Amazon also appears on one of the Piraeus reliefs.[138]

A more or less identical location for the following four single figures is warranted by two or more copies: the bearded Greek wearing a pilos-like pointed helmet of the Boeotian type (1),[139] armed with a round shield and striding to the right at centre bottom on L and slightly to the left of centre on P (he is also found on two Piraeus reliefs);[140] the supine Amazon (2) along the bottom edge on L, S, P, A (though she does not appear on any of the Piraeus reliefs);[141] the so-called Capaneus (14) from the top edge of the shield, slightly right of centre, on S, P, B, and three of the reliefs (Figs. 29, 34);[142] the seated Amazon (16), seen from the back in the centre above the gorgoneion on S and P, and somewhat to the side on L (and on one very fragmentary relief) (Fig. 33).[143]

Among the figures showing an essential difference in their location, and presenting great difficulty in reconstructing, are—surprisingly—those of "Phidias" (17) and "Pericles" (15), the only ones on the shield mentioned expressly by the sources. On S they are traditionally recognized at the bottom centre fighting side by side (Fig. 27) although here their appearance does not exactly correspond to Plutarch's description in *Pericles* 31, namely that "Phidias" was armed with a stone which he was shown lifting with both hands, and that "Pericles" held a spear: on S instead "Phidias" swings a double axe, and "Pericles' " weapon appears to be a short sword or dagger. The attitude of the latter, however, in which his raised arm conceals his features, and the mature face and the bald head of the former, correspond to Plutarch's description and are sufficient warranty that these are the two figures in question. On L, however, the same pair can be recog-

nized in the two images at the top centre of the shield. Although of rough and sketchy execution their attitudes are very accurately represented. On one important point L corresponds to the text: "Phidias" is shown lifting a great stone with both arms. To confound the matter P shows a third variant: here "Pericles" can be identified at the bottom centre while a figure at the top centre, of which only a leg remains, was perhaps "Phidias." He was certainly not at the bottom on P since there his place next to "Pericles" is occupied by the bearded Greek in a Boeotian helmet (1), armed with a round shield and stepping to the right, visible also in the same location on L. "Pericles" seems also to have been at the bottom on the very fragmentary A where only a part of the legs and what appears to have been a left arm remain. It is interesting that among the Piraeus reliefs only two very fragmentary ones preserve possible traces of "Pericles" while none can with certainty be said to show "Phidias."[144]

The distribution of a number of other figures depends to a great degree on where we place "Phidias" and "Pericles," a decision which is, or should be, based on several considerations. Thus, if "Phidias" is throwing a rock, as he is described by Plutarch and shown on L, then it is much more logical that he should be doing so from the top rather than from the bottom of the hill on which, as we have seen, the action takes place. Equally, Plutarch's wording concerning "Pericles" would seem to indicate that he was actively fighting against an Amazon, μαχομένου πρὸς Ἀμαζόνα. It is therefore somewhat difficult to believe that he should be placed at the bottom of the shield where his opponent would be none other than the supine Amazon (2), an already completely vanquished figure and not an active or dangerous combatant. If, on the contrary, we place "Pericles" at the top, where indeed he can, and has been, identified on L, then he can very suitably be paired with the seated Amazon (16) below him who has succeeded in scaling the hill and is now being prevented from further advance by his vigorous action. She is seen above the gorgoneion on P and S, and somewhat to the right on L.[145] The difficulty of the problem is clearly demonstrated by the fact that while in their verbal reconstructions Ras and Becatti place both "Phidias" and "Pericles" at the top,[146] in their graphic reconstructions Brommer and Schlörb place them both at the bottom; Harrison, on the other hand, separates them by placing "Phidias" at the top and "Pericles" at the bottom; Jeppesen places "Phidias" at the top recognizing, rather unconvincingly, "Pericles" in the figure of the Greek archer in chlamys (11); Strocka has them both at the top but doubles the figure of "Pericles" at the bottom (Fig. 83).

Whether these two figures were in fact portraits of the two men has been much disputed but no firm answer can be found. While some believe that they were indeed portraits, others do not give credence to the portrait story in Plutarch and other writers, all of whom wrote some centuries later when an apocryphal popular tradition regarding the whole matter may have prevailed.[147] In any case, whatever the answer, it does not influence the actual reconstruction, our primary concern, though it seems unlikely, as Harrison and Strocka have pointed out, that in the fifth century contemporary personages were represented with the mythical ones in a mythical event such as Amazonomachy. There is on the other hand no doubt, as the strong characterization of many of the Greeks suggests, that legendary heroes connected with the myth were depicted in the scene. More or less successful attempts have been made in identifying the various heroes, such as Theseus, Peirithoos, Pandion, Kekrops, Erechtheus, Heracles, and others.[148]

An Amazon who can be closely connected with the figure of "Phidias" at the top is the one seen fallen headfirst on S and L (18), and shown on one of the reliefs (Fig. 36). On S we see that, her hair flowing loosely around her upside-down face and her arms limply framing her head, she has just started her precipitous fall, her feet still touching the ground, her body falling backward down the steep slope. On L her fall, quite logically, seems to have been caused by a rock hurled by "Phidias" at the top (17) immediately above and a little to the right of her, but on S, where she is at the bottom left side, it is not clear who her opponent is nor why she should be shown starting her fall there.[149]

For the other figures on the left side C and V are of greatest help. Combined they show 11 figures, some of them only very fragmentary, V six from the upper left, C five from the lower left quadrant of the shield. Some of these can also be seen elsewhere: the "knifing group" on C (25-26) can be identified in about the same location on L;[150] the Amazon fleeing downhill on V (21) can probably be identified with a similar figure in the same location on L. The wounded Amazon in a semi-supine position on V (22) is seen in a very similar attitude, though shifted toward the inside of the track, on S. None of these are preserved on the Piraeus reliefs. The pair of the Greek with the round shield charg-

ing right (24) and the Amazon fighting him with both arms raised behind her neck (23), as only fragmentarily seen on V, is confirmed by C where, however, only the lower part of the Amazon is preserved. The group is represented on two reliefs, one today in Berlin, the other in Rome, preserving only the Greek on both cases.[151] The two remaining groups on the left side are the group of the Greek with scabbard and axe (27) slaying an already prostrate Amazon (28) on S and C (not found on the reliefs), and the group of the Amazon charging uphill (20) fighting against a chlamys-wearing warrior (19). Concerning the first of these groups, if we imagine "Phidias" hurling a stone at the top of the shield, then there is no difficulty equating the group of the Greek with scabbard and double axe, and the prostrate Amazon on C with the almost identical, although differently located group on S, the only difference being that on C the figure of the Greek is just another Greek warrior, whereas on S this figure was probably contaminated with the figure of "Phidias" from the top.[152]

The complete figure of the Amazon (20) of the second group, charging uphill in combat with a Greek (19) who is placed, as the Amazon's pose suggests, much higher than herself, is seen inside just left of, and slightly above, the Gorgoneion on V where only the right, strongly bent knee of the Greek above and a little to the right of her remains. On S this Amazon, whose lower part only is preserved, is moved to the outside of the lower left quadrant with her opponent in the same relative position as on V, that is above and slightly to the right of her. Whereas only his right knee is visible on V, on S only his left outstretched leg and perhaps a piece of the drapery remain. This group is reflected on two Piraeus reliefs, one in Copenhagen (Fig. 32), the other in the Piraeus. On both of them the Amazon is shown in the same or very similar pose as on V and S, but the Greek, who unfortunately is very fragmentarily preserved on both reliefs, shows a different relative position to the Amazon as well as a variation in his own pose: instead with an extremely sharply bent right knee, suggesting that he may have knelt on it, and with the left leg outstretched far to support himself, as confirmed by the combined evidence of V and S, he is shown in a lunging attitude, very similar but in mirror image, to that of the Amazon. A large rock on which they both place their right and left foot respectively, lies between them. The lowering of the Greek to the same level as the Amazon, and the resulting change in his pose, is an adaptation dictated by the horizontally rectangular shape of the reliefs. Since the location of this group differs so much on S and V a certain freedom in its reconstruction appears to be allowable. In our three-dimensional model the group could best be fitted in on the outside as on S, but shifted higher. This has resulted in a harmonious composition of the top of the shield where five Greeks, with "Pericles" in the centre, are represented holding the key position of the battle.[153]

P and S are our main sources for the figures in the right upper quadrant of the shield. Here the most prominent position is occupied by the already mentioned "Capaneus" (14), a heroic bearded figure wearing a taenia. Kneeling on his right knee he reaches with his right hand behind his head. He appears in a practically identical location on P and S, as well as on the very fragmentary B where he is the only preserved figure. He is also on three of the reliefs, in Chicago, Piraeus, and Rome (Fig. 34), each of them preserving him more or less fragmentarily on the left side of the framed panel whose right side, containing his opponent, is missing each time. From S and P we know that this was the sword-drawing Amazon, ascending left (13). One of the reliefs shows her as a beautiful helmeted figure directing her gaze upward toward her adversary (Fig. 35), an attitude correctly copied on P and the relief, but not on S where her head is turned to her left and downward.[154]

Difficulties arise with the remaining three to four figures in this section because the evidence is rather confusing. On S besides 14 (whose left outstretched leg only is preserved) and his sword-drawing opponent 13, two more ascending Amazons, each armed with a spear and a round shield, can be seen from the back (10 and 12). On P Amazon 12 is omitted and a new figure of a Greek in a cloak (9), descending left and attacking Amazon 10, is introduced.[155] The reliefs indicate that in this section there was yet another figure, a Greek archer in chlamys (11) as opponent of one of the backview Amazons, possibly 12 (Fig. 30). This very decorative figure, pulling a bow at close range, though represented on four of the reliefs, is not included on any of the copies of the shield.[156] Paired with Amazon 12, whom we have taken to be distinct from Amazon 10, and also not identical with the Greek 9, we have placed him on the outside track where his vigorous wide-spread movement is very suitably accommodated.[157]

One more group remains to be mentioned, that of a wounded Greek (5) being helped by his com-

panion (6). It is seen outside right on P and, in the same location, on A, but there only two feet of the seated figure remain. The arched back of the helper corresponds well with the curvature of the rim of the shield, and the group's wedge-like composition fits well between the groups 3-4 below and 7-8 above. The group is also preserved on one of the Piraeus reliefs, now in the Vatican, and possibly on another very fragmentary one in the Piraeus.[158]

On the basis of this lengthy but still very abridged analysis 28 figures have emerged, each based and documented by at least one monument. There are 14 Greeks and 14 Amazons, 12 of them on each side of the shield, with four placed more or less vertically through the centre, namely "Pericles" (15) and his opponent, the seated Amazon (16) above the gorgoneion, the bearded Greek in profile (1) and the supine Amazon (2) below.[159] The compositional scheme has turned out to be characteristic of the classical period, not absolutely symmetrical but strongly balanced in its counterparts with the peak of the action concentrated in one central point, in this case the top. The same compositional conception is evident in all the sculpture of the Parthenon where, as on the pediments or the base of the Parthenos, the action climaxes in the centre or is directed toward a focal point (such as that formed by the gods on the east side of the frieze). Our three-dimensional reconstruction has afforded us a much better understanding of the pose, the action, and the grouping of the figures as they were on an equally three-dimensional original though, with an open mind, we are aware that new evidence, and our possible re-evaluation of the present evidence, may result in changes in the composition.

The table on page 47 with brief descriptions or nicknames of the figures, and a listing of the copies in which they appear, may help the reader to orient himself in this rather complicated matter. Similar charts of the two most recent reconstructions, those by Harrison and Strocka, have been added for comparison.

Except for the copies of the shield here discussed, and the extracts from it used for decorative purposes on the Piraeus reliefs, the Amazonomachy of the shield has left surprisingly little trace in later art. A few relief fragments from the Kerameikos and the Agora, discovered in the course of the last 20 years, reflect more or less closely some of the types from the shield but do not seem to depend directly upon it.[160] In Attic vase painting only two vases appear to some extent to have been inspired by it, a lekythos by Aison in Naples and a lekythos by the Eretria Painter in New York.[161] This can probably be attributed to the difficulties presented by the unique circular composition which does not lend itself easily to the usual frieze-like form of other representations of the same subject.[162]

The round of the shield is most commonly estimated to have measured about 4 m in outside diameter. If the flat rim was about 0.25 m wide, the diameter of the convex decorated area would have been about 3.50 m.[163] The gorgoneion in the centre, of the same type as the gorgoneion of the aegis,[164] was about 0.80 m in diameter. This left the circular ring-like space for the representation of the Amazonomachy about 1.35 m wide (though not all of it could be used since the strongly convex part around the edge was unsuitable for the relief figures). As our scale model (1:10) has shown, the number of 28 figures for the original composition, if they were about 0.70 m high as suggested by the Piraeus reliefs, seems to fill the available flat surface most favourably.

b) Interior

The Strangford shield (No. 31) is the only copy where a trace of the Gigantomachy in the interior of the shield, mentioned by Pliny (*HN* 36.18), has been preserved. The faint remains of the painting represent, on the left, a bearded Giant lifting a rock; on the right, another Giant kneeling, hurling a stone with his right hand. An animal skin is wound round his left arm.[165]

On the basis of some Attic and Italian vase paintings of the end of the fifth century B.C.[166] which, it has been argued, reflect the Gigantomachy of the shield, the Phidian composition can be approximately reconstructed. As in the Amazonomachy of the exterior, this is easier for those types of both gods and Giants that repeat themselves on the various monuments. A. von Salis, Vian, and Walter have made a detailed study of the evidence, and a reconstruction in line drawing has been proposed by Vian.[167]

Of all the vase paintings the Attic crater in Naples, Inv. No. 2045, of 420-400 B.C., has generally been considered closest to the original (Fig. 84).[168]

Only partially preserved it shows, on one side, the following scene: inside an arch, or dome of heaven, as it has been interpreted, seven Giants climb the rocky sides of Olympus. Of these particularly noteworthy are: a Giant in backview in the centre inscribed [ΠΟΡΦΥΡ]ΙΩΝ; a Giant at the left, armed with helmet and shield, inscribed

				Harrison			Strocka		
	Brief description or nickname	Copies	Reliefs	No.	Copies	Reliefs	No.	Copies	Reliefs
1	Bearded Greek in profile	L P	XXII, XXIII	1	L P	N 1	8	L P	XXII, XXIII
2	Supine Amazon	L S P A		3	L S P A	R 1	11	L S P A	Keram.?
3	Hair-pulling group: Greek	L S P A	I-III	4	L S P A	N 3	9	L S P A	I-III
4	" Amazon	L S P A	I-III	5	L S P A	N 3	10	L S P A	I-III
5	Helper group: Wounded	P A	V, VI	6	P L*?	N 3, R 1	7	L P A	V, VI
6	" Helper	P	V, VI	7	P L*?	N 3, R 1	6	L P	V, VI
7	Greek in Corinth. helmet	S P	IV	8	S P	N 1	15	S P	IV
8	Amazon retreating uphill	S P	IV	9	S P	N 1	16	S P	IV
9	Greek attacking downhill	P		10	S P		18	S P	
10	Backview Amaz. with spear	S P		11	S P	N 3, R 1	17	S P	VII-X, Ker.
11	Greek archer in chlamys		VII-X	12	S*? P*?		28		VII-X
12	Second backview Amazon	S	VII-X	omits this figure			omits this figure		
13	Amazon drawing sword	S P	XI	13	S P	N 1	19	S P	XI
14	"Capaneus"	S P B	XII-XIV	14	S P B	N 3	20	S P B	XII-XIV
15	"Pericles"	L S* P* A*?		2	L*? S P A	R 1	4	L S P	
16	Seated Amazon	L S P	XV	17	S P	N 1	5	L S P	XV
17	"Phidias"	L S* P?		15	L S*	N 2	3	L	
18	Amazon falling headfirst	L S*	XV	23	L S*	N 1	2	L S	XV
19	Greek with chlamys & sword	S V	XIX, XX	omits this figure			23	S V	XIX, XX
20	Am. w/round shield & sword	S V	XIX, XX, Ag.	16	S* V	N 4	21	S V	XIX, XX, Ag.
21	Amazon fleeing downhill	L V		19	L V		1	L V	
22	Semi-supine Amazon	V S*		20	V	R 2	22	V S	XVI?
23	Amazon with axe (?)	V C		21	V C		25	V C	
24	Greek charging right	V	XVII, XVIII	22	V	N 2	24	V	XVII, XVIII, Ker.
25	Knifing group: Amazon	L C		26	C		27	C	XXI?
26	" Greek	L C		27	C		26	C	XXI?
27	Greek with axe	S C		24	C		13	S C	XXI?
28	Amazon falling prone	S C		25	C		12	S C	XXI?

Harrison duplicates 28 (her 25) creating a new figure of kneeling hoplite on top (her 18).

Strocka duplicates 15 (his 4) creating a double of Pericles (his 14) at the bottom.

Reliefs are marked with Roman numerals as in Strocka; *indicates changed location; {denotes duelling pairs.

ΕΝΚΕΛΑΔΩΣ (*sic*); two Giants lifting enormous rocks; another climbing. On the right is Ge, emerging from the earth. Outside the celestial arch, near the centre top, is Zeus' chariot to right; Selene on her mule at far left; quadriga of Helios ascending, far right; bottom of a long chiton by the horses of the chariot. A large portion between Selene and Zeus' chariot is missing. The other side shows a Dionysiac scene with Satyrs and Maenads.

From the similarity of the rock-heaving Giants on the vase with those on the Strangford shield von Salis plausibly assumes that the rest of the vase repeats the representation of the shield. Its most striking and unusual feature is the semicircular line symbolizing the arch of heaven, and separating the gods outside it from the Giants below and inside it. In effect this line reflects the constructional metallic bracing from the inside of the shield which was deftly utilized by Phidias in his composition. Quite emphatic is Walter who maintains that of all the vase paintings with Gigantomachies only the crater in Naples reflects the shield, showing Phidian innovations in both composition and content.[169] While the other vases may be more in the tradition of the great paintings by Mikon and Polygnotus, the Naples crater in a definitely different and unique manner clearly shows the Giants assailing Olympus itself: attacked from below by sons of Earth the gods, with Zeus and Athena at the centre of the action, defend themselves from the lofty heights of their mountain.

In his reconstruction (Fig. 85) Vian differs from von Salis in that he does not limit the gods to the outside of the arch only: Heracles and Athena he places inside it, on the same footing with the Giants.[170] Particularly stressed is the presence of Zeus in the centre top of the heavenly arch: other gods converge toward him symmetrically from either side. Phidias seems to announce in this way to the spectator that Zeus is not only in the centre of the battle but also at its culminating point. The same conception is found on the Panathenaic frieze where the human procession, starting from the south-west corner, proceeds in two directions along the north and south sides of the temple to converge over the east end where the gods are assembled to witness the culmination of the ceremony. This manner, favoured by Phidias in composing large groups of figures in action around a central focal point, could perhaps be taken as a further support for our reconstruction of the Amazonomachy of the exterior: the important figures of "Pericles" and "Phidias" are not only in the centre of the upper part, they are at the culminating point of the battle where it takes a decisive turn in favour of the Greeks.

A weak point in Vian's reconstruction in our view is the extremely large number of figures included in it, 39 human and 15 animal figures, to be exact. Considering that these are disposed only in about two thirds of the upper part of the shield, the rest being reserved for the snake, the unavoidable result is a comparatively small size of the figures. This would have surely struck a discordant note in the original when compared with its counterpart, the Amazonomachy of the exterior, in which the 28 figures were, as we have seen, of an average height of 0.70 m.

In our reconstruction (Figs. 86, 87), relying mainly on the Naples crater and the Strangford shield for the Giants, and on the mentioned vase paintings for the gods, we have obtained a number of 24 figures, 15 gods and 9 Giants, and 14 animals, either ridden by the gods or pulling their chariots. This number of figures and their comparative size (a vertical segment of roughly 60 degrees, which would have been too severely obscured by the snake in the concavity of the shield, has been left free) agrees better with the density and the overall effect of the Amazonomachy on the exterior. It is perhaps interesting that, were the entire surface filled with figures, just about four more figures would be needed, which would bring their number to 28, the same as on the exterior.

Unlike Vian we have kept the Giants separated from the gods by the line depicting the dome of heaven (but in effect functioning as the circular bracing of the shield). This unusual yet perfectly natural compositional scheme, as suggested by the Naples crater, no doubt reflects the unique composition of the original. For the individual figures, however, we have used the types as reflected in the above mentioned vase paintings (see n. 166). For their placing, even their number, within the composition there is even less definite evidence than there is for the figures of the Amazonomachy, and the reconstruction is more certain in its main scheme than in the detail.

As on the Louvre amphora we have placed Zeus at the top of the heavenly arch, descended from his Nike-driven chariot, and hurling the thunderbolt. To his right (spectator's left) is Athena in a long chiton, armed, and aiming her spear at the Giants below. Both her dress and her attitude, remarkably similar to that of "Pericles" on the outside of the shield, follow the crater in Leningrad and, in reverse, the amphora in the Louvre. Further down is

Dionysus in his panther-drawn biga, as we see him on the Würzburg fragment and the Louvre amphora. Following him is Apollo as on the Louvre amphora (in reverse). Below him is Ares as on the pelike in Athens, one of the Dioscuroi on horseback as on the Louvre amphora and, as a counterpart to the Sun and his chariot at the right end (known from the Naples crater), Selene on her mule. On the right of Zeus we have placed a female figure in a long chiton similar to Demeter (in reverse) on the Louvre amphora but considered to reflect the Phidian type of Hera.[171] In any case, a female figure next to Zeus can suitably be interpreted as his mate. Right from her are: Poseidon on horseback, hurling a trident, as on the Louvre amphora; Hermes from the same source, though modified in dress and reverse pose; Artemis, kneeling, shooting bow and arrow, as on the Leningrad crater; equally Heracles (reversed) and Pollux, both from the Louvre amphora. Rounding up the scene on the right is Helios with his chariot, suggested by the Naples crater: with Selene as a counterpart he is a favourite Phidian motif for framing Olympian scenes appearing, among others, also on the base of the Parthenos. All the gods aim their weapons downward and inward into the concentration of Giants in the inner circle who are seen throwing torches and rocks in their struggle for the high target, the very seat of the Olympians. The occasional reversing of the figures in the reconstruction was necessitated by the inward-centred composition as opposed to the continuously running frieze-like treatment on the vases. The dynamic and somewhat baroque style of the Gigantomachy has prompted Schweitzer to date it later than the Amazonomachy, and contemporary with the late phase of the Parthenon: this is quite possible since the interior surface was probably fitted into place and adjusted only after the statue, the shield, and the snake were installed in their place.[172]

This brings us to the question of the technique of the interior. Von Salis maintains that it was not chased like the exterior but painted in the manner of the many shields represented on vase paintings.[173] This view is shared by most, but not by all, other scholars.[174] Examining more closely the well-known passage in Pliny (*HN* 36.18) (cf. Testimonia, p. 1) we see that the same word "caelavit" refers not only to the Amazonomachy on the convex exterior, but also to the Gigantomachy on its concave interior: ". . . sed in scuto eius Amazonum proelium caelavit intumescente ambitu parmae, eiusdem concava parte deorum et Gigantum dimicationes . . ." As Praschniker in his *Parthenonstudien* has very rightly remarked,[175] it is furthermore not at all certain that another passage in Pliny (35.54): ". . . cum et Phidian ipsum initio pictorem fuisse tradatur clipeumque Athenis ab eo pictum . . ." refers to the shield of Athena although the advocates of a painted Gigantomachy take it as a support for their theory. There is no reason, he says, why Pliny's description of Athena's shield should not be trusted.

Strongly opposing the view that the inside was painted is also Dorothy B. Thompson. In her article "Mater Caelaturae"[176] she says: ". . . 'Caelavit' means chased and is commonly used for metalwork in relief, certainly not for painting . . . the shield of the great Athena, which, being of gold, had no reason whatsoever for being painted inside or out." This reasoning is the only logical one. C. Smith's and von Salis' argument is that the reliefs on the inside would have made the shield impractical and inconvenient to use, and that—following the shields used in real life—the interior of Athena's shield had to be lined with some soft material, such as leather or a woven fabric which was either painted, if the former, or embroidered, if the latter. Mrs. Thompson argues that "the Parthenos' shield was scarcely primarily a practical weapon in which the roughness of a relief might have been inconvenient." It is absurd to imagine that the gold (or more probably the gilded bronze, as the recent calculations indicate) was painted. Mrs. Thompson's suggestion instead is that the shield was worked in the following way: the outside was in repoussé relief; to conceal the resulting unevenness of the inner surface the inside was lined in metal in a way similar to that on the Vaphio cups. This interior lining, the surface for the Gigantomachy, could be treated in relief or engraved.

Smith's most important argument for a painted interior is the evidence of the Strangford shield. This, however, loses its force when we remember that on the copies of the Parthenos details in relief were often rendered in painting only, such as the leaf-and-dart pattern on the base of the Varvakion statuette[177] or, most certainly in many cases, the straps of the sandals. Smith himself assumes that the scales of the aegis on the Patras copy, which appears smooth today, may have been painted in. His other argument, that the reliefs would make the shield impractical for use, does not seem logical in the case of a statue. Agreeing with Mrs. Thompson we prefer to imagine the figures on the interior of the colossal shield worked in low relief, and not painted, and that is how we have made them in our reconstruction.

The shield did not rest directly on the base of the statue, but was placed on a support, as can be seen on the Varvakion, Lenormant, and Patras copies. Such a support was necessary not only from a technical point of view—it would be structurally unsafe to have the heavy shield touch the ground with only a tiny portion of its circumference—but also for aesthetic reasons: without a support the shield, reaching to the height of Athena's hand, might have been too large, rather out of proportion with the figure. Raising it also improved the view of the interior. It is quite possible that the original support was decorated with reliefs, or perhaps painting, but since the archaeological evidence for any such decoration is lacking, we have left the support undecorated. It has been suggested that Athena's base should be understood as the ground of the Acropolis and the shield support as a rock. Archaeological evidence of the copies, showing smooth rectangular bases and a functionally shaped support, does not favour this view.[178]

It was not accidental that the myth of the war between the gods and the Giants was incorporated into the statue of Athena. In the myth, represented also in the metopes over the east end of the Parthenon, Athena was believed to have been one of the leading protagonists in achieving the victory of the gods.

5. Serpent

The serpent Erichthonius coiled in the concavity of the shield. Though it may seem an awkward place for Phidias to have included the large snake, crowding that side of the statue and obscuring the view of the interior of the shield, copies offer clear testimony that the snake was indeed so placed. A glance at the copies with the left side sufficiently preserved, the Lenormant, Varvakion, Belgrade and Patras marbles, and the terracottas from Geneva and Exeter (Nos. 1, 2, 4, 6, 42, 44, Figs. 1, 2, 5, 7, 44, 45) will uniformly show the snake coiled between the figure and the shield. This also agrees with Pausanias' description that the snake was next to the spear, ... πλησίον τοῦ δόρατος ..., which in turn was on the left-hand side of the figure (1.24.7). In a sense, it is almost natural for a snake to be snuggling inside a sheltering niche, such as presented by the concave side of the shield. On the other hand, here too, as in the case of the column and the circular bracing on the interior of the shield, Phidias seems to have transformed a functional necessity into a compositional feature: the large, heavy shield, leaning slightly inward and grasped only lightly by Athena's fingers at its top edge, certainly had in some manner to be more safely supported. Indeed, all the copies preserving the snake show that it performed that technical function by leaning against the shield with the upper, raised part of its body and, at the same time, resting much of it firmly on the ground.

Concerning the material of which the serpent was made it may be assumed that it was gilded bronze, as discussed in the chapter on technique and materials.[179]

Erichthonius, who was fathered by Hephaestus and born in a snake-like form by Earth, as the legend has it, was reared with motherly care by Athena on the Acropolis. Phidias fittingly included him in the great statue of the goddess not only to show him as her guardian but quite certainly also as a symbol of Athena's closeness to the soil of Athens.

NOTES

1. Strabo IX, p. 396; Schol. Demosthenes *Contra Androtion* 13, p. 597 (ed. Reiske); Schol. Aristoph. *Pax* 605; Pliny, *HN* 34.54 (Overbeck 645-648). The date is based on an amended reading of the passage in the scholiast to Aristophanes, and is also deduced from the inscriptions containing the building accounts of the Parthenon.
2. The best recent analysis of the site, and of the construction of the base and the statue is given by G. P. Stevens. "Remarks upon the Chryselephantine Statue of Athena in the Parthenon," *Hesperia* 24 (1955) 240-276. The data given here are based on Stevens' calculations.
3. Pliny, *HN* 36.18. For the Roman cubit which measured 0.444 m cf. *Enciclopedia Italiana* XII, 71, *s.v.* CUBITO.
4. Opinions differ as to the exact height of the original. The Varvakion copy (No. 2) with its height of 1.045 m including the base, and 0.94 m for the statue alone, has by some been regarded as representing a scale of 1:12 and by others as 1:10 (cf. Schuchhardt, 44, n. 39). If we accept Stevens' calculation of the clear height of the cella to have been 13.09 m, then we must regard Pliny's cubit to have been based on the shorter Ionic foot of 0.294 m rather than on the longer Doric of 0.326 m (although the latter was used in the rest of the Parthenon): if based on the longer Doric foot, as Dinsmoor maintains (*AAG*[3], 178), the height of the statue would have been 39 Doric feet (our 41 ft. 10 in., or 12.75 m), and this seems extremely high for the cella where a statue of that height would practically be touching the ceiling. Pliny's 26 cubits should therefore be taken, as Gerkan does, to have been based on the shorter foot (0.294 m) resulting in 11.466 m for the total height of the statue and the base, or 11.544 m arrived at by Stevens (who takes Pliny's cubit to have been based on the slightly longer Roman foot of 0.296 m, thus measuring 0.444 m). Stevens' calculated height of 10.10 m for the statue

alone, when compared with 0.94 m for the Varvakion statuette, shows that the latter is closer to a scale of 1:10 than 1:12 but 1:11 would be almost exact.

5. F. C. Penrose, *Principles of Athenian Architecture*, 2nd ed. (London 1888) pl. 4.
6. Jahn-Michaelis, *Arx Athenarum a Pausania descripta* (Bonn 1901) pl. XIII.
7. F. Winter, "Zur Parthenosbasis," *JdI* 22 (1907) 55-70.
8. K. Lehmann-Hartleben, "Die Athena Parthenos des Phidias," *JdI* 47 (1932) 17-46, figs. 1-5.
9. C. Praschniker, "Das Basisrelief der Parthenos," *JOAI* 39 (1952) 11: ". . . Der Vorschlag von K. Lehmann-Hartleben . . . ist wohl ganz unmöglich . . ." Goethert, *JdI* 49 (1934) 157-161; also *AJA* 39 (1935) 386; Becatti, 110: ". . . mentre il Lehmann-Hartleben ha voluto nella sua ricostruzione obliquamente appoggiare lo scudo alla base, facendo stringere la lancia nella sinistra e abbassando su un piedestallo più basso insieme allo scudo anche la colonna sorreggente la Nike, falsando tutta l'armonia della costruzione che perde tutta la sua unità e la sua organicità . . ."
10. Overbeck 661, note a); Becatti, 64.
11. C. Praschniker, "Das Basisrelief der Parthenos," *JOAI* 39 (1952) 8; J. Liegle, *Der Zeus des Phidias* (Berlin 1952) 431; Schuchhardt, 47, pl. 36 b.
12. Paus. 5.11.8 (Overbeck 696).
13. Becatti, 58.
14. Hes. *Theog.* 570 ff.; *Op.* 50 ff.
15. Beazley, *Hesperia* 24 (1955) 317.
16. *Ibid.*
17. O. Puchstein, "Die Parthenonskulpturen," *JdI* 5 (1880) 79-117; F. Winter, "Zur Parthenosbasis," *JdI* 22 (1907) 55-70; W. R. Lethaby, "The Parthenos," *JHS* 37 (1917) 152 ff; H. Schrader, *Phidias* (Frankfurt a/M 1924) 297-302.
18. Becatti, Chapter IV dealing with the base, "Il relievo Del Drago e la Base della Parthenos," 53-70; C. Praschniker, *JOAI* 39 (1952) 7-12.
19. Schrader, *op. cit.*, 300-302, fig. 282; Becatti, pl. 8, fig. 21, and detail fig. 25.
20. Hesperia 2 (1933) 65, fig. 23; Becatti, pl. 11, fig. 30.
21. Becatti, pl. 10, figs. 26-28.
22. The dependence of the figures on the candelabrum base and the Del Drago relief, and their derivation from the base of the Parthenos, has recently been questioned on stylistic grounds by W. Fuchs. Cf. Helbig, *Führer*[4], 769, No. 1068. A study of the copies of the Parthenos in general and her various relief-decorated details in particular reveals, however, that the stylistic criterion alone cannot and must not be too strictly applied in determining a copy's derivation from the gold and ivory original.
23. See n. 14.
24. See n. 12.
25. A. H. Smith, "The Making of Pandora," *JHS* 11 (1890) 278-283, pls. XI, XII.
26. Praschniker compares this interpretation of Selene with the one on the North Metope XXIX of the Parthenon. A great similarity between the two is obvious: *Parthenonstudien* (Augsburg-Vienna 1928) 92, figs. 71, 72.
27. The female figure could possibly be Hestia or Demeter. The male, leaning on a stick, would most probably be expected to be Hephaestus, but since he already appears as a figure in himation next to Athena and second from Pandora, it is difficult to say whom this male figure is meant to represent. Ares or Apollo would quite naturally be present at such a gathering of the Olympians, but this figure, leaning on a stick, could hardly be either of the two.
28. The relief is more usually interpreted as the story of Alcestis. Robert, *Thanatos*, 39th Winckelmann Programm, 1879; K. Schefold, *Classical Greece* (Art of the World Series, Engl. tr. 1967) pl. 2, p. 206, with the youthful winged figure representing Thanatos instead of Eros.
29. Jeppesen, *Acta Archaeologica* 34 (1969) 59.
30. T. B. L. Webster, *Greek Interpretations* (Manchester 1942) 55.
31. Dinsmoor, *AAG*[3], 153.
32. Köhler, *AthMitt* 5 (1880) 89 ff.
33. Gerkan, 55-58.
34. *IG*II[2], 1393, 1443, 1455.
35. *Hesperia* 24 (1955) 260.
36. *Ibid.*, n. 19.
37. Lange, *AthMitt* 6 (1881) 58.
38. DarSag *s.v.* CAELATURA.
39. D.B. Thompson, "Mater Caelaturae," *Hesperia* 8 (1939) 297-298; DarSag *s.v.* SCULPTURA; Marjorie J. Milne, "The Use of τορεύω and Related Words," *AJA* 45 (1941) 390-398; G. M. A. Richter, "A Greek Silver Phiale in the Metropolitan Museum," *AJA* 45 (1941) 363-389; D. K. Hill, "Ancient Metal Reliefs," *Hesperia* 12 (1943) 97-114; *id.*, "More about Ancient Metals," *Hesperia* 13 (1944) 87 ff.
40. See Part II, notes 13 and 29.
41. *JOAI* 39 (1952) 8, fig. 1.
42. Lange, *AthMitt* 5 (1880) 378. The fact that the motif was painted on the upper fillet rather than on the moulding below it, where it belongs, can be explained as a mistake and a misunderstanding of the form on the part of the late copyist.
43. *Hesperia* 24 (1955) 257, fig. 12.
44. See n. 37.
45. M. Bieber, *Griechische Kleidung* (Berlin-Leipzig 1928); Richter, *Sc. and Sc.*, 87-92; *id., Korai*, 6 ff; 109 f; Furtwängler, *Masterpieces*, 21 ff.
46. M. Bieber, *op. cit.*, 12, fig. 15.
47. Furtwängler, *Masterpieces*, 11.
48. F. Noack, "Ein Gewandmotiv der Parthenos," *JdI* 45 (1930) 198-217, figs. 1-15. The pattern of the folds along the opening of the peplos on the right side, as it appears on the "Minerve au Collier," is identical with the same motif on the "Lemnia" in Dresden, and Noack uses it as a further proof of the Phidian authorship of the Dresden statue. Picard, *Manuel* II, 390-391, doubts the strength of the argument as presented by Noack. D. K. Hill, *ArtB* 18 (1936) 155, supports the diamond scheme for the Parthenos.
49. Max. Tyr. *Diss.* 14.6; Aristid. *Orat.* 24, T. I, 528 (Overbeck 659, 660).
50. The general term for bracelet is ψέλλιον or χλιδών but snake bracelets are often referred to by ancient writers more specifically as δράκοντες.Cf. DarSag, *s.v.* ARMILLA.
51. DarSag, *s.v.* AEGIS.
52. A very detailed analysis of the snakes of the aegis and

their various arrangement is given by D. K. Hill, *ArtB* 18 (1936) 159-160.

53. Although some coins, such as the Athenian coins of the Imperial period (Grose II, No. 5945, pl. 210, 20) show the spear held in the left hand and turned outward (spoiling the harmony of the composition in our opinion), a further proof for its leaning against the left shoulder and not being held in the hand is supplied by a gem in Berlin, No. 2758, Furtwängler, *AG*, pl. 44, *66*. As a matter of fact, even on some coins the spear is actually not held in the hand, but is shown as standing freely, without apparent support, behind the shield or protruding from behind the arm of the goddess. Cf. the Hellenistic coins of Cappadocia, Grose III, Nos. 9202-9212, pl. 33, 4-13; No. 8917, pl. 317, 1 (early 4th century B.C. from Side); Grose III, Nos. 9325-6, pl. 340, 16 and 17 (Hellenistic from Syria).

54. Peschka has maintained that the absence of the gorgoneion on the breast of the Lenormant statuette is not accidental (Peschka, *Summary*, p. 25): some sources (Overbeck 681-684) mention that a gorgoneion was stolen from the Acropolis. Peschka thinks that this refers to the gorgoneion from the aegis of Athena Parthenos which, however, was later replaced by Lycurgus (about 338 B.C.). The Lenormant copy was, according to him, made in the interval when the gorgoneion was missing, i.e. between about 400-338 B.C. On the whole, his evaluation of the Lenormant copy is very favourable, not only concerning the composition and the poise, which is more harmonious than Varvakion's, but also some details, such as the necklace, which had been overlooked, or the attitude of the snake which is dignified and simple, and not complicated and fussy as on the Varvakion. The difficulty about his theory regarding the gorgoneion, however, lies in the fact that we cannot be certain which gorgoneion is referred to in the sources. It is difficult to imagine that somebody would climb up to a height of about 10 m to steal an ivory gorgoneion from the breast of the goddess while there was a gold-plated gorgoneion on the much more easily accessible shield. Dinsmoor, indeed, interprets the sources as referring to the latter, but according to the inventories, it was recovered at the latest by 398 B.C. and restored to the statue somewhat later. It cannot be proved that any serious theft or damage was done to the statue before 295 B.C. when its gold was stripped by Lachares (*AJA* 38 (1934) 96). Peschka's early dating of the Lenormant is unacceptable; cf. Schuchhardt, 52 (first or second century A.D.); Strocka, 14 (probably third century A.D.).

55. DarSag, *s.v.* GORGONES. Good examples of the early type of the gorgoneion are the terracotta antefixes from Tarentum of the sixth century B.C. G. M. A. Richter, *The Metropolitan Museum of Art, Handbook of the Greek Collection* (Cambridge 1953) pl. 19, d-g; R. A. Higgins, *Catalogue of Terracottas in the British Museum* (Oxford 1954) I (Plates), pl. 171, Nos. 1251, 1251 bis. Also the Royal Ontario Museum antefix (918.6.1), said to have come from Selinus, of the mid-sixth century B.C. *ROMBull* 7 (March 1928), 14. An excellent example for the "middle" type is a British Museum terracotta mould for an antefix from Spata, Attica, of a late fifth century date. Her "eyes and the idealized expression recall the sculptures of the Parthenon frieze," Higgins, *op. cit.*, Vol. I (Text) 187-188, No. 708, (Plates) pl. 92.

56. On the type of the Parthenos gorgoneion see also Schuchhardt, 33-34, nn. 8, 9 who believes that the gorgoneion of the type seen on the Varvakion shield and aegis, but without the wings and surrounded by two knotted snakes instead, comes closest to the original.

57. DarSag, *s.v.* SOLEA. Mary Wallace's claim that incurved sole does not occur before 300 B.C., *AJA* 44 (1940) 213 ff, figs. 1-5 is refuted by M. Bieber, *AJA* 45 (1941) 62 f. Generally for footwear K. Erbacher, *Griechisches Schuhwerk* (Würzburg 1914).

58. K. Schefold, *Orient, Hellas und Rome* (Bern 1949) 122; Becatti, 122, pl. 69, figs. 1-5. The loutrophoros, only the lower part of which is preserved, is dated to about 400 B.C. by Garcia y Bellido but is considered Neo-Attic by Schefold and Becatti. Cf. A. Garcia y Bellido, *Archivo Espanol de Arquelogia* 18 (1945) 332-338, figs. 1-6; A. Blanco, *Museo del Prado, Catalogo de la Escultura* (Madrid 1957) 116 ff, No. 303-E, pls. LXVIII-LXIX.

59. E. Langlotz, *Phidiasprobleme* (Frankfurt a/M 1947) 44, pl. 12. A good example of a sandal decorated with reliefs can be seen on a colossal acrolithic foot in the Palazzo dei Conservatori, belonging probably to a statue of Isis, found near the Via Appia, and dated to the Hellenistic or Graeco-Roman period. Although the subject of the reliefs is different (dolphins, Tritons, Erotes), the sandals of the Parthenos might have served as a model. Cf. Dow, *AJA* 48 (1944) 242 ff.

60. The soles of the Varvakion statuette are 0.015 m high. If on a scale of 1:11 (see n. 4 above), the height of the soles in the original must have been about 0.165 m. This, approximating Lange's estimate of 0.17 m, seems more probable than the extremely high estimates of 0.327 m by Langlotz, or 0.35 m by Becatti. On our model, the soles, relatively of the same proportion as those on the Varvakion statuette, seem to be about right: anything on the scale of Langlotz' or Becatti's estimates would be disproportionately high.

61. A possible exception is Schol. Ar. *Pax* 605 (Overbeck 629): ... ὁ Φειδίας, ... ὑφείλετο τὸ χρυσίον ἐκ τῶν δρακόντων τῆς χρυσελεφαντίνης Ἀθηνᾶς, ... Here δρακόντων may possibly refer to the snake bracelets of Athena (see n. 50 above) but it is more probable that the snakes of the aegis are meant.

62. Pfuhl III, pls. 82, 83 (Panathenaic amphorae); pl. 87, fig. 314; pl. 91, fig. 320; pl. 102, fig. 355; *id.*, *Masterpieces of Greek Drawing and Painting* (London 1926) pls. 13, 28, 34; *BMCat Jewellery*, No. 2775, fig. 89.

63. For a Royal Ontario Museum example, cf. *ROMBull* 20 (1953) pl. 12, No. 84; DarSag, *s.v.* ARMILLA, fig. 527 (from Pompeii).

64. Wotschitzky, *JOAI* 38 (1950) 116, suggests that the shaft of the column under the Nike, if done in ivory, may have been bound with gold rings which served to tie the various courses of the ivory plates.

65. The best and the most comprehensive study of the

head of Athena Parthenos is given by Loeschke, *Festschrift* (see Part I, n. 10).

66. *Masterpieces*, p. 13.
67. S. Reinach, *Têtes Antiques* (Paris 1903) 59-60, pl. 73.
68. DarSag, *s.v.* EBUR.
69. See Part I, n. 12.
70. *JHS* 36 (1916) 373-402; Helbig⁴, No. 475.
71. See particularly the Euthydikos kore, Richter, *Korai*, 98 ff, fig. 565.
72. *AthMitt* 8 (1883) 291 ff.
73. See n. 65 above and Part I, n. 10.
74. *AttMitt* 6 (1881) 174-190.
75. DarSag, *s.v.* GALEA, p. 1443.
76. *Ibid.*, pp. 1434-1435.
77. See n. 65.
78. E.g. the helmet of Athena on the interior of a cup by Douris in the Vatican, or that of Achilles on a cup by the Penthesilea Painter in Munich, P. E. Arias and H. Hirmer, *Greek Vase Painting* (New York, n.d.) pls. 147 and 169 respectively.
79. Picard, *Manuel* II, 385-389, who calls it "un peu sauvage."
80. Furtwängler-Reichhold, Series I, 1-14, 55-62; pls. 1-3, 11-13; Richter, *Korai*, pl. XII-b.
81. C. Seltman, *Greek Coins* (London 1933) pl. XXIII, 4-6, pl. XXIV, 1, 3; R. A. Higgins, *Catalogue of the Terracottas in the British Museum* (Oxford 1954), I (Text) 361-362, Nos. 1329, 1330; (Plates), pl. 183. A very good example is a fifth century head from Cyprus, *Archaeology* 13 (1960) No. 3, opposite title page.
82. *BMCat Jewellery*, Nos. 1664-68, pl. XXX.
83. Grose II, pl. 210, 2.
84. G. Becatti, *Oreficerie antiche* (Rome 1955) Nos. 383 and 385 a, b, pl. 101, from Tarentum and Syracuse, now in the Naples and Syracuse museums.
85. R. A. Higgins, *op. cit.*, II (London 1959), No. 1701, pl. 38.
86. *BMCat Jewellery*, No. 1462, pl. XXII.
87. Paus. 1.24.7; Plin. *HN* 36.18; Arrian, *Epict. Diss.*, 2.8.20 (Overbeck 649, 661, 662).
88. *IG* I², 262, 264-270, 272, 275: these are the earliest inscriptions mentioning the wreath and its weight of 70 drachmae or about 300 gr (428-406 B.C.). After that until 316 B.C. only parts of the wreath and their weight are mentioned: *IG* II², 1376, 1377, 1394, 1395, 1414.
89. *IG* II, 649, 652, 657, 660, 674; *IG* II², 1382, 1384, 1386, 1388-90, 1393, 1400, 1413, 1415.
90. For other copies on coins where the Nike is visible cf. the surveys given by Lacroix and Lermann, p. 10 above.
91. R. Carpenter, *ArchEph* 1953-54, II, 41-55.
92. *AthMitt* 5 (1880) 376, sketch on p. 371; 6 (1881) pl. I.
93. *Hesperia* 13 (1944) 173-209.
94. *Staatliche Museen* IV, K 181-183, pls. 74-76, fig. 9; H. Schrader, "Das Zeusbild des Phidias in Olympia," *JdI* 56 (1941) 13 ff; D. B. Thompson, *Hesperia* 13 (1944) 191, fig. 9; Becatti, p. 134, pl. 72, figs. 222, 223.
95. See n. 89.
96. See n. 88.
97. *IG* II², 1376, 1377.
98. Gerkan, 55-58.
99. Stevens, *Hesperia* 24 (1955) 267.
100. Lethaby, *JHS* 37 (1917) 143.
101. A possible exception is Plutarch, *Per.* 13:

    ὁ δὲ Φειδίας εἰργάζετο μὲν τῆς θεοῦ τὸ χρυσοῦν ἔδος, καὶ τούτου δημιουργὸς ἐν τῇ στήλῃ εἶναι γέγραπται

    (Overbeck 650), but it is more probable that στήλη here refers to an inscribed slab which has not come down to us rather than to a base or a support under the Nike (for these and other meanings of the word in antiquity cf. H. G. Liddel and R. Scott, revised by Sir Henry S. Jones, Oxford 1949, *A Greek-English Lexicon, s.v.* στήλη). Cicero mentions that Phidias was not allowed to inscribe his name on the statue (and a support under the Nike would certainly be considered a part of the statue), and that, to make up for it, he had secretly included his portrait on the shield (*Tusc.* 1.15.24, Overbeck 674): opifices post mortem nobilitari volunt. quid enim Phidias sui similem speciem inclusit clipeo Minervae, cum inscribere non liceret?
102. *BdA* 36 (1951) 356, fig. 49.
103. The coin illustrated *AJA* 38 (1934) 104, fig. 4 is from the Newell collection; others are in the Cabinet des Médailles, the British Museum, and the University of Turin. Imhoof-Blumer, pl. Y, xxii; Gardner, *Types*, pl. x, 28; *BMCat Coins Lycaonia, Isauria, Cilicia, pl.* XIX, 14. Only the latter three examples were known to Lermann.
104. Schreiber, 545 ff; Jane E. Harrison and Margaret Verrall, *Mythology and Monuments of Ancient Athens* (London 1890) 445-462, figs. 47-58; Richter, *Gems*, No. 269, pl. 39; *id., Studi in Onore di A. Calderini e R. Paribeni* III, 147 ff. Miss Richter does not consider the testimony of the Varvakion statuette, a few non-Athenian coins, and a poor lead tessera, strong enough to warrant the column on the original. It should perhaps be noted that the lack of the column on the marble copies ought not to be considered decisive enough evidence against its presence in the original: on none of them have the arms and hands of Athena, and the Nike, been preserved, and where the arms appear they are a modern restoration (an exceptional case is the Lenormant statuette where the arms are preserved, but the whole right side is unfinished, thus leaving unknown the final intentions of the copyist). Consequently the column may well have been included on some or most of the marble copies. A thorough study of all the bases as to their state of preservation, their size, and accordingly, their ability to receive the column, might furnish more evidence.
105. Dinsmoor, *AAG*³, 178, 236, n. 1.
106. Lange, *AthMitt* 6 (1881) 67-73; W. R. Lethaby, *JHS* 37 (1917) 142-143; W. Lübke, E. Pernice, B. Sarne, *Die Kunst der Griechen* (Vienna 1948) 238; Stevens, *Hesperia* 24 (1955) 240 ff; J. Liegle, *Der Zeus des Phidias* (Berlin 1952) 420; Brommer, 9; W. Zschietzschmann, "Die hellenistische und römische Kunst," *Die antike Kunst* II, part 2, 6; B. Schweitzer, *JdI* 55 (1940) 188, 214; 72 (1957) 6; Schuchhardt, 35; K. Schefold, *Classical Greece* (Art of the World Series 1965) 122; Weickert, 1-22; Wotschitzky.
107. Stevens, *loc. cit.*, 264.

108. Gardner, *Types*, pl. xv, 19; cf. Pausanias' description (2.27.2) of the chyselephantine statue of Asclepius at Epidaurus, the work of Thrasymedes of Paros (about 350 B.C.) to which a coin of Epidaurus corresponds very closely (*BMCat Coins Peloponnesos*, pl. 29, 14): it can clearly be seen that the right hand of Asclepius, extended over the head of a coiled snake, touches the snake, and is accordingly supported by it. A reference to this statue is also made by Lange, *AthMitt* 6 (1881) 67-68.
109. Already Lange, *loc. cit.*, has pointed this out.
110. A. E. Raubitschek, *Dedications from the Athenian Acropolis* (Cambridge, Mass. 1949); R. Bormann, "Stelen für Weihgeschenke auf der Akropolis zu Athen," *JdI* 3 (1888) 269-285.
111. The column, although crudely executed on terracotta reproductions, corresponds in essentials very closely to the Varvakion column.
112. Lange, *op. cit.*, 72. Schuchhardt, 35, though believing in the column in the original, speculates that its metal leaves decoration was not of the Corinthian order but of a "Sonderform."
113. Painted details definitely were used on this copy as best shown by the painted cyma on the pedestal of the statue.
114. B. Schweitzer, "Phidias, der Parthenonmeister," *JdI* 55 (1940) 170-241; C. Weickert, "Studien zur Kunstgeschichte des 5. Jahr. v. Chr., Teil 2: Ἔργα Περικλέους, *Abhandlungen der deutschen Akademie der Wissenschaften, Philolog.-Hist. Klasse* (1950) 22 ff.; A. Wotschitzky, "Um die Entstehung des korinthischen Baustils," *JOAI* 38 (1950), 110-134; *id.*, "Zum korinthischen Kapitell im Apollotempel zu Bassae," *JOAI* 37 (1948) 53-80; Dinsmoor, *AAG*[3], 178, 236, n. 1; Lehmann-Hartleben, "Die Athena Parthenos des Phidias," *JdI* 47 (1932) 34 ff.; E. Langlotz, *Phidiasprobleme* (Frankfurt a/M 1947) 102; B. Schweitzer, "Neue Wege zu Phidias," *JdI* 72 (1957) 6.
115. *JOAI* 38 (1950) 110 ff. Dinsmoor's reconstruction of this detail *AAG*[3], pl. 37 shows, inaccurately, as argued by Wotschitzky, two rows of acanthus leaves, one above the other.
116. *Hesperia* 24 (1955) 256, fig. 11; 266, fig. 16.
117. *JOAI* 38 (1950) 122.
118. *Hesperia* 30 (1961) 1-7.
119. *JOAI* 38 (1950) 110-134.
120. *Ibid.* 114-115.
121. Dinsmoor, *AJA* 38 (1934) 96, n. 3.
122. Overbeck 664, 680-687.
123. J. Fink, *AthMitt* 71 (1965) 90-97.
124. Kieseritzky, *AthMitt* 8 (1883) 304; J. Liegle, *Der Zeus des Phidias* (Berlin 1952) 414 ff; Fink, *op. cit.*
125. Furtwängler, *JdI* 4 (1889) 47; R. Herbig, *RömMitt* 66 (1959) 138 ff, pl. 34.
126. Herbig, *loc. cit.*
127. Transl. by H. M. Hubbell, The Loeb Classical Library (London 1942).
128. H. J. Rose, *A Handbook of Greek Literature*, 2nd ed. (London 1942) 272; Martin Schanz, *Geschichte der Römischen Literatur* III (Munich 1896) 108.
129. H. Schrader, "Zu den Kopien nach dem Schildrelief der Athena Parthenos," *Corolla Ludwig Curtius* (1937) 81 ff, pls. 17-21; *id.*, *SBBerl* XI, 1931, 1 ff; S. Ras, "L'Amazonomachie du Bouclier de l'Athéna Parthénos," *BCH* 68-69 (1944-45) 163 ff; F. Brommer, "Zu den Schildreliefs der Athena Parthenos des Phidias," *Marburger Winckelmann-Programm* 1948, 10ff; *id.*, *Athena Parthenos* ("Opus Nobile" 2, 1957) 13-14, reconstruction fig. 6; G. Becatti, *Problemi Fidiaci* (Milan-Florence 1951) 111 ff, 244 ff, pls. 64-68, 103-112; D. von Bothmer, *Amazons in Greek Art* (Oxford 1954) 209 ff; B. Schlörb, "Beiträge zur Schildamazonomachie der Athena Parthenos," *AthMitt* 78, 1963 (1965) 156 ff; K. Jeppesen, "Bild und Mythus an dem Parthenon; Zur Ergänzung und Deutung der Kultbildausschmückung des Frieses, der Metopen und der Giebel," *Acta Archaeologica* 34 (1963) 1 ff.; E. B. Harrison, "The Composition of the Amazonomachy on the Shield of Athena Parthenos," *Hesperia* 35 (1966) 107 ff.; V. M. Strocka, *Piräusreliefs und Parthenosschild, Versuch einer Wiederherstellung der Amazonomachie des Phidias* (Bochum 1967).
130. N. Leipen, *Phoenix* 17 (1963) 119-122, pl. 4; J. W. Graham, "Acropolis and Parthenos: New Models in the Royal Ontario Museum," *Greece and Rome* 10, Suppl. 1963, 77 ff, pl. XI b.
131. As the rest of the reconstruction, the reliefs of the shield were modelled by Miss Sylvia Hahn of the Royal Ontario Museum. I am greatly indebted to her for the never-failing readiness, and the good sense as a trained artist and sculptor, with which she discussed with me the problems involved.
132. For a fuller description and bibliography of the copies, cf. the listing of the copies, pp. 8, 12. For excellent illustrations see also Becatti, figs. 190-205, 309-335. Strocka's recent detailed study with line drawings of all the archaeological evidence pertinent to the shield is particularly valuable.
133. Aeschylus, *Eumenides* 685-690; Strocka, 133; Harrison, 128; Becatti, 117. This mythical battle, often treated in the art of the fifth century, was clearly an allusion to the Greek victories over the Persians earlier in the century.
134. Strocka, 130; *JdI* 61-62 (1946-47) 82.
135. The ground is not indicated in any of the recent reconstructions in line drawing though Strocka, p. 130, says that the figures are to be imagined as disposed at various levels of the surrounding terrain and could not have been set on a smooth neutral background. As early as 1865 Conze observed that the figures shown above each other on the copies could be understood as a unified composition only if a groundline of the rocky slopes is imagined, *AZ* 23 (1865) 36. Recently Hanfmann and others have remarked that the Amazonomachy of the shield, in order to narrate a story to the viewer, was conceived in a panoramic manner in which "a continuous background of rocks and mountain, and perhaps even of the city walls of legendary Athens" would make the unity of action in time and space readily perceivable, *AJA* 61 (1957) 77. That groundlines and rocks are compatible with the pictorial style of the period is well illustrated by the contemporary vase paintings which no doubt reflect the tendencies and innovations of the great Polygnotan wall-paintings of a generation or so earlier.

Pausanias' and other writers' descriptions of these lost paintings imply that in them the idea of pictorial space was for the first time expressed; cf. M. Robertson, *Greek Painting* (Geneva 1959) 122, 128-9. In his discussion on the nature of a Polygnotan painting Carl Robert has stressed the prominent role played by the features of the terrain represented in these paintings. He is further convinced that the Amazonomachy of the Parthenos shield was inspired by the Polygnotan Amazonomachy and that consequently its action was shown as taking place on the steep hillside: ". . . Wie deutlich ist ferner auf dem von der Polygnotischen Amazonomachie abhängigen Parthenosschild der abschüssige Abhang characterisiert . . ." 18. *Hallisches Winckelmannsprogramm* (1895) 93. Cf. also P. Fehl, "The Rocks on the Parthenon Frieze," *Journal Warbourg and Courtauld Institutes* 24 (1961) 1 ff. Among the many contemporary vase paintings where the terrain under, behind, and around the figures is prominently featured cf. the pelike in Boston with Elpenor and Odysseus of about 440 B.C., *AJA* 38 (1934) 339 ff.

136. In the following discussion on the composition of the figures parallels have been drawn chiefly with the two latest reconstructions, those by Harrison and Strocka. The scope of this study, dealing with all the aspects of the Parthenos and not only the shield, does not permit us to devote to it as much space and detailed analysis as the great complexity of the subject would otherwise warrant.
137. Harrison types 4-5; pp. 115, 121; Strocka types 9-10, pp. 40 ff, 119. The hair-pulling motif, frequent in the Classical period, is not quite clear on P and on one of the reliefs but its authenticity on all the other copies should be accepted.
138. Harrison types 8-9, pp. 115, 121; Strocka types 15-16, pp. 48-49, 119. The modelling of the Amazon 8 took place before I was able personally to examine P and the one, rather badly preserved, Piraeus relief on which the group appears. Relying on first-hand inspection of S only, and on indistinct illustrations of the rest, our Amazon is shown in front instead of in the back view.
139. A. M. Snodgrass, *Arms and Armour of the Greeks* (1967) 94, pl. 58.
140. Harrison type 1, p. 120; Strocka type 8, pp. 13, 32, 90 ff, 121-122.
141. Harrison type 3, p. 120; Strocka type 11, pp. 13, 17 f, 32 f, 36, 103 f, 123.
142. Harrison type 14, pp. 115, 123; Strocka type 20, pp. 20, 35, 38, 67 ff, 120.
143. Harrison type 17, pp. 116, 123; Strocka type 5, pp. 12, 19, 35, 73 ff, 120.
144. Harrison type 2 for "Pericles" and 15 for "Phidias," pp. 120, 123; Strocka types 4 and 14 for "Pericles" and his duplication, pp. 12, 16, 19, 32, 91, 93, 103, 119, 121, 122; type 3 for "Phidias," pp. 12, 121.
145. Harrison type 17, Strocka type 5. Harrison, p. 123, fits her "beneath the feet of the apex figure" which in her reconstruction is Phidias, but she leaves her without an opponent. As Phidias' opponent she makes the upward charging Amazon from the Copenhagen relief (Fig. 32). Strocka pairs the seated Amazon, as we do, with Pericles (his 4) at the top who, however, is a near-duplication of his type 14 at the bottom, standing over the supine Amazon.
146. Ras, 183; Becatti, 117.
147. Richter, *Portraits* I, 150 f; Harrison, 132; Strocka, 134, nn. 251-253.
148. Harrison, 126 ff; Strocka, 133 ff; Eckstein.
149. Harrison type 23, pp. 118, 124; Strocka type 2, pp. 12, 15, 76 ff, 122. Her rigid backward fall, as seen on S and L, should, in accordance with some monuments showing the motif as it was treated in the Classical period (such as the volute crater in Tarentum of *c.* 410 B.C., *CVA Taranto* fasc. IV, D.r, pl. 26, 2), be modified on our model so as to show her body less vertical and more arched with the feet to the left, a position which is both more accurate in perspective to the hillside and more pleasing than the one of "plummeting through space" (Harrison, 118). Due to his very detailed and thorough study of the Piraeus fragments Strocka, 76-77, has been able to show that a pair of feet including a portion of the left side of the frame belong to this Amazon who, on the right of the same relief, is shown together with the seated Amazon (16). That clearly places 18 where we had approximately placed her, making her a conquered and fallen opponent of the stone-throwing "Phidias" (17). Harrison, *loc. cit.*, places this fallen figure in the lower left segment of the shield leaving her pairless, and so do all the other reconstructions but Strocka's. If, however, as the Piraeus relief undoubtedly shows, she was a neighbour of the seated Amazon (16), whose place slightly off centre above the gorgoneion is certain, then Harrison's pairing of the stone-throwing "Phidias" with the Amazon charging uphill (20) is invalidated, as is her assumption that the latter's opponent is the stone-throwing figure of "Phidias" whom she, in addition to the usual identification at the top on L and at the bottom on S, also recognizes—wrongly, in our opinion—in the fragmentary, chlamys-clad Greek on the Copenhagen relief (Fig. 32); cf. Harrison types 15-16, pp. 116, 123; Strocka types 21-23, pp. 84-90; n. 114, figs. 35, 37.
150. Strocka types 26-27, p. 28; Harrison types 26-27, p. 125, identify the group at the left on L as a transposed Helper-group 5-6 from the right side on P and A. Due to the sketchy character of L this interpretation may or may not be correct. With Ras, 174 and von Bothmer, 212 we think that the group on L, though somewhat changed in pose, corresponds to the Knifing group on C.
151. Harrison types 21-22, pp. 115, 118, 124; Strocka types 24-25, pp. 79-84, 122.
152. Harrison types 24-25, pp. 117, 118, 125; Strocka types 12-13, pp. 16, 30, 123. Harrison duplicates 28 creating a kneeling hoplite at the top (her type 18), a duplication rightly challenged by Strocka, n. 211.
153. The opponent of Amazon 20 is in Harrison's reconstruction identified with the stone-throwing Phidias at the top, an identification validly refuted by Strocka, n. 114, who—as myself—takes the Greek of the Copenhagen relief to be a different figure, independent of "Phidias." Harrison types 15-16, pp. 116, 117, 123; Strocka types 21-23, pp. 20, 24, 84 ff, 119, 123. Plac-

ing the group 19-20 where we have, has necessitated a slight inward shifting of Amazon 21.

154. "Capaneus" (14), occupying a key position in the battle, is generally interpreted as a fatally wounded figure reaching in an instinctive and agonized gesture for the wound on the back of his neck. This interpretation stems from Winckelman who, long before the discovery of the rest of the Piraeus reliefs and the Patras shield, which clearly show this figure to be part of an Amazonomachy, interpreted the notable Greek on the Villa Albani relief as the mythical king Capaneus struck down by the thunderbolt of Zeus; cf. Strocka, 68. Harrison, 130, and *Agora* XI, 133, interprets him as Erechtheus, the legendary Attic king and hero of the Acropolis. She reconciles the idea of his being apparently wounded (by the trident of Poseidon, as the legend has it) and yet showing undiminished power, by proclaiming him the *ghost* of the hero who now appears here "in the guise in which he died long ago." Strocka, on the other hand, says that his wound must have been inflicted from behind, by an Amazon in flight who nevertheless somehow managed to strike him a deadly blow (Strocka does not say with what weapon). The chance of an Amazon doing that is deemed impossible by Harrison, *loc. cit.*: ". . . Since the figure is at the top of the shield and facing us, it is impossible that he has been wounded in the back by any figure on the shield, for no one can be behind him . . ." and he can therefore only be the ghost of his old, thunderbolt-stricken self, now shown fighting among other victorious heroes at the top of Phidias' composition. In my view, and in this I agree with Frazer, *AJA* 43 (1939) 455, this powerful Greek, rather than mortally hit and hopelessly near his tragic end, as Strocka sees him, strains, with all his might, to defend his and his companions' position, and to ward off the boldly approaching Amazon 13: I suggest that in his right hand, brought up behind his head and hidden from the spectator's view (we must bear in mind his location in the topmost part of the shield), is a short slashing sword which he is about to use against his adversary 13 who, in her approach to the summit, is equally preparing to fight with a sword which she is in the act of drawing. The short slashing sword, used in close combat, is often portrayed in vase paintings of the sixth and the fifth centuries B.C., and actual examples of the curved one-edged weapon have been found. Cf. Snodgrass, *Arms and Armour of the Greeks* (London 1967) 97 f, figs. 44, 50; B. Shefton, *AJA* 64 (1960) 173 ff. The iconographical motif persists into Roman times, and closely comparable is F. Hermet, *La Graufesenque* (Paris 1934) Text, 20, 139; Plates, pl. 19, *58* and particularly *59* where a sword-wielding warrior with the shield in his left, and with the right hand raised high above and behind his head, braces himself firmly with the left leg (terra sigillata from the time of Domitian, 86-96 A.D.). The figure of Capaneus is Harrison's type 14, pp. 115, 123, 130; Strocka, type 20, pp. 67-73.

155. Harrison type 10, p. 122; Strocka type 18, pp. 19, 34 f, 120. Strocka and Harrison identify Amazon 12 on S with the Greek 9 on P though on S the figure, obviously an Amazon, seems to aim her spear at the figure above her, while on P the figure is clearly a Greek attacking Amazon 10 lower than himself. We have interpreted 12 on S and 9 on P as two separate figures.

156. Harrison type 12, p. 115 f, 122; Strocka type 28, pp. 53 ff, 119, 120.

157. Due to the fact that Harrison and Strocka take the Greek 9 and Amazon 12 to be the same figure thus leaving out Amazon 12 in their reconstruction, they make the archer 11 the opponent of the backview Amazon 10 putting him on the inside track on the spot where on P only a pelta can be seen filling a vacant space. Retaining 12 as a separate Amazon on the outside track as on S, we have placed her opponent the archer 11 on the outside. This pair, requiring quite a bit of space in their movement, fits quite well on the outer track (and this is also the place where Brommer has placed them in his reconstruction).

158. Harrison types 6-7, pp. 115, 121, pl. 40a; Strocka types 6-7, pp. 13, 34, 37, 50 ff, 119; Helbig^4, 1140.

159. Brommer's reconstruction gives a total of 25 figures with some vacant spaces left for eventual later additions; von Bothmer counts a minimum of 31 figures, 15 Greeks and 16 Amazons. Between these extremes are Harrison and Jepessen with 27 figures, and Schlörb and Strocka with 28. Strocka, 124, n. 213, suggests that 28, as a "perfect number," consisting of the sum of its parts (1+2+4+7+14=28) was perhaps not accidentally chosen by Phidias who may have been influenced by such symbols of harmony propounded by Anaxagoras and other contemporary philosophers.

160. Harrison, 132-133; Strocka, 103-107, 113.

161. For the lekythos by Aison, Ras, 194 ff; Bielefeld, 28; Arias—Shefton—Hirmer, *A History of Greek Vase Painting* (1962) pl. 205; Beazley, *ARV*^{2} II, 1174, No. 6. For the Eretria Painter lekythos, Richter-Hall, *Red-Figured Athenian Vases in the Metropolitan Museum* (1936) 175 ff, No. 139, pl. 144; Ras, 197; Beazley, *ARV*^{2} II, 1248, No. 9.

162. Bielefeld, 32.

163. We have followed Schrader's estimated measurements, *SBBerl* XI (1931) 185 ff which also agree with those by Brommer, *MarbWPr*, 10; v. Salis, *Jdl 55* (1940) 120 f; Möbius, *Gnomon* 23 (1951) 226; Becatti, 121; Langlotz, *Phidiasprobleme*, 41; P. E. Arias, *Problemi di Scultura Greca* (1965) 372. Jeppesen's, 18, and Harrison's estimates are somewhat higher (4.50 m for total diameter, about 4 m. without rim), while Lehmann-Hartleben, Gerkan, and Strocka go as high as 4.80 m.

164. See p. 29 and n. 55.

165. C. Smith, *BSA* 3 (1896-97) 137; A. v. Salis, *JdI* 55 (1940) pl. II; Vian, *Répertoire*, pl. L, No. 419.

166. *1. Calyx crater in Naples, AM* 69-70 (1954-55) pl. XI, 2; Furtwängler-Reichhold 2nd S., 195, figs. 72-75; Vian, *Répertoire*, No. 389; Becatti, 120-121, figs. 211-214; *2. Amphora from Melos in the Louvre*, Furtwängler-Reichhold, pl. 96, 97; *AM* 69-70 (1954-1955) pl. XI, 1; Vian, *Répertoire*, No. 393; *JdI* 55 (1940) 125, fig. 20; *3. Volute crater in Würzburg, JdI* 55 (1940) 127 ff, figs. 21 ff; Vian, *Répertoire*, No. 392; *4. Pelike in Athens*, Nat. Mus., *ArchEph* 1883, pl. 7; *JdI* 55 (1940) 124, fig. 19; Vian, *Répertoire*, No. 391;

5. Fragment in Leipzig, Vian, *Répertoire*, No. 390. Somewhat later than these are *1. a crater in Leningrad*, Vian, *Répertoire*, No. 394 (Apulian), and *2. a crater in Bari*, Vian, *Répertoire*, No. 395 (Apulian).

167. A. v. Salis, "Die Gigantomachie am Schilde der Athena Parthenos," *Jdl 55* (1940) 90-169, figs. 1-36, pls. I-II; Vian, *La guerre*, 149-165, fig. 7 (a reconstruction); H. Walter, "Gigantomachien," *AthMitt* 69-70 (1954) 95 ff.
168. See n. 166, *1*.
169. *AthMitt* 69-70 (1954-55) 98.
170. Vian, *La guerre*, 154, fig. 7.
171. Vian, *op. cit.*, 158.
172. B. Schweitzer, "Phidias der Parthenonmeister," *Jdl* 55 (1940) 201.
173. A good example is seen on the same crater from Naples (n. 166, *1*) where Enceladus' shield is painted in the interior with scenes from a Gigantomachy (Fig. 84). Also on the amphora from Melos in the Louvre the shield of Athena shows paintings on the interior.
174. C. Smith, "A New Copy of Athena Parthenos," *BSA* 3 (1896-97) 121-148, pl. 9; W. R. Lethaby, "The Parthenos," *JHS* 37 (1917) 140-159; Picard, *Manuel* II, 394; Schweitzer, *Jdl* 55 (1940) 170-242; Vian, *La guerre*, 150.
175. C. Praschniker, *Parthenonstudien* (Augsburg-Vienna 1928) 248.
176. *Hesperia* 8 (1939) 297-298.
177. See p. 27, n. 42.
178. P. Fehl, *Journal of the Warbourg and Courtauld Institutes* 24 (1961) 30.
179. P. 19f. Schol. Arist. *Pax* 605 (Overbeck 629) says that Phidias was accused of embezzling "ivory in scales:"
. . . τὸν ἐλέφαντα τὸν εἰς τὰς φολίδας . . .
This may possibly be interpreted as ivory scales of the serpent, as does Harrison, pp. 111, 112, but φολίδας (φολίς, ίδος, ἡ) in this connection more likely refers to the "scales" of the ivory itself which in an unworked natural state tends to split into concentric layers like the rings of a tree or an onion.

Conclusion

Let us very briefly sum up the knowledge gained by this study and incorporated into the model of Athena Parthenos. Placed in the reconstructed east cella of the Parthenon the model reproduces on an approximate scale of 1:10 the colossal gold and ivory statue as it stood towering in its awesome grandeur in the subdued light of the temple's interior. Rising from the large base the statue was in the richness of its materials and the elaborateness of its decoration unlike any other statue in antiquity except, perhaps, that of Zeus at Olympia, also made by Phidias and lost to posterity.

Standing on the Acropolis of Athens in a splendid temple built especially for her, the Maiden Goddess was the sublimation of the Periclean age, of the Greek Golden Age itself. The legendary themes of victorious struggles of civilized forces against brute barbarism, which were worked into the decoration of the statue, proclaimed the pride the Athenians felt in being the chief conquerors and averters of the powerful Persian aggressor. Under the protection and guidance of the Warrior Goddess they had won the victory which the goddess, symbolically, proffered in her right hand.

She stood majestically in the centre of the rectangular base decorated along its front with the scene of the Creation of Pandora, the first woman. The event which took place in the presence of 20 gods, who according to the legend bestowed various gifts upon Pandora, may have symbolized the generosity of the gods towards Athens itself. The relief figures were worked in gilded bronze on the white marble background, and the crowning moulding of the base was equally decorated with a gilded leaf-and-dart motif.

The young goddess stood at her ease, with her left leg relaxed and drawn slightly back, the rich folds of her girdled Doric peplos playing about her body and falling heavily and simply to her feet. Round the thick soles of her sandals pairs of Lapiths and Centaurs in single combat were represented. Though her face is difficult to reproduce—it eluded even the ancient copyists—we know that it was young and of rounded outline, and that it bore an expression of serenity and joyful strength. It must have, at the same time, carried an air of divine remoteness since from a height of nearly 40 feet the goddess directed her gaze into the distance in front of her and not down toward the mortals who might be observing her from the ground. Her luminous golden dress, girdled with two knotted snakes, was resplendent with the highlights falling on it, in the early morning hours, from the eastern doors of the temple. The formidable helmet with upturned cheek-pieces was adorned with mythical beasts, a sphinx flanked by two pegasoi carrying the triple crest, and a griffin on the upturned cheek-pieces. Foreparts of 11 animals sprang from above the browband. Snakes coiled around the edges of the scaled aegis which on the breast of the goddess was fastened with a gorgoneion. One of the snakes on the left shoulder supported the heavy spear by coiling around it.

The round shield of gilded bronze rested by the goddess' left side, and its top edge she held lightly with her left hand. On its exterior, around a gorgoneion in the centre, the mythical battle of the Greeks and the Amazons in the defence of the Acropolis was represented in fairly high relief; on its interior, in low relief or engraved, the battle of the gods and the Giants. Twenty-eight figures, 14 Greeks and 14 Amazons, most of them fighting duels, formed the composition of the exterior, and a similar number of figures fought in the Gigantomachy on the interior. In the latter's central part, inside an encompassing celestial arch, the Giants were shown throwing rocks or piling them in an attempt to climb the Olympus and to assault the gods who defended themselves from their heights outside the arch. Erichthonius, the legendary snake of the Acropolis, who according to the legend was dear to Athena, coiled in the concavity of the shield, with his head and upper part raised as if ready to protect his mistress.

On the right palm of the goddess a life-size winged and crowned Victory was poised. In her hands she held the ribbon ends of an open wreath. On tiptoe and with her golden peplos blowing against her legs and thighs, she appeared to have just alighted in order to crown, with the wreath she carried, the city of Athens for its valiant victories over the Persians.

Under the right hand of the statue there stood an elegant column with a fluted ivory shaft and a golden capital which supported the colossal outstretched arm carrying the gold and ivory Victory. The capital, with its decoration of acanthus leaves, palmettes, and volutes, was unlike any other capital thus far made: it was especially designed for the Parthenos and it was only later taken over into architecture where it became known as the Corinthian order.

The owl of Athena may have been included in the statue. It possibly stood on the base between the

column and the figure but due to insufficient evidence it has been omitted in the model.

The image and its accessories projected great opulence: the statue was literally part of the Treasury of Athens at its peak. But it was more than that, it was also a synthesis of the art of the fifth century: while in the huge solemn figure itself Phidias in certain ways still followed the tradition of the archaic maidens from the Acropolis from the early part of the century, in the decorative reliefs of the statue, particularly those of the shield, he showed a new and different style, fully mature and freed of conventions, the classical style at its purest.

FIGS. 2 AND 3: Varvakion statuette (2), front and right side views. *National Museum, Athens*

FIG. 1:
Lenormant statuette (1). *National Museum, Athens*

FIG. 4:
Madrid statuette (3). *El Prado, Madrid*

FIG. 5:
Belgrade statuette (4). *National Museum, Belgrade*

FIG. 6:
Princeton statuette (5). *Art Museum, Princeton University*

FIG. 7:
Patras statuette (6). *Patras Museum*

FIG. 8:
Conservatori torso (7). Museo Nuovo, *Capitoline Museums, Rome*

FIG. 9:
Argos statuette (12).
Argos Museum, Greece

FIG. 10:
Gortyn statue (15). *Heraclion Museum, Crete*

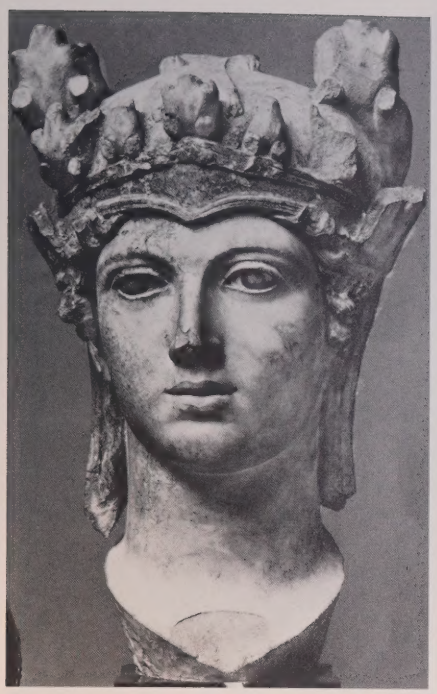
FIG. 11:
Acropolis torso (17). *Acropolis Museum, Athens*

FIG. 12:
Baltimore torso (18). *Walters Art Gallery, Baltimore*

FIG. 13: "Minerve au Collier" (19). *The Louvre, Paris*

FIG. 14: Statue by Antiochos (20). *Museo Nazionale, Rome*

FIG. 15: Statue from Pergamon (21). *Staatliche Museen, Berlin*



FIGS. 16 AND 17: Head in Berlin (24), front view and right profile. *Staatliche Museen, Berlin*

FIG. 18: Head in Copenhagen (25).
Ny Carlsberg Glyptotek

FIG. 19: Head in Paris (26).
The Louvre

FIG. 20: Head in Cologne (27).
Römisch-Germanisches Museum, Cologne

FIG. 21: Head of the statute by Antiochos (20)

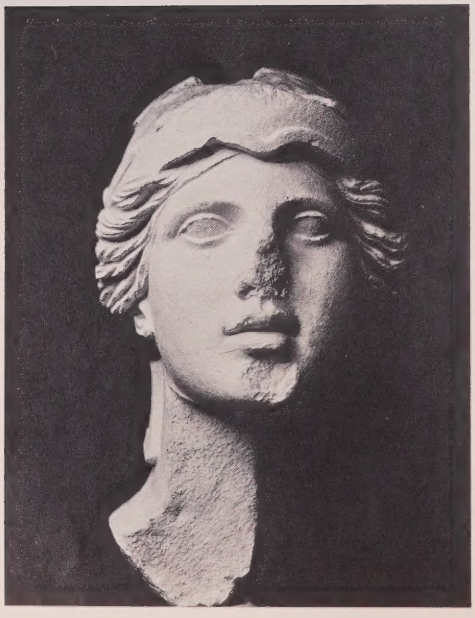


FIG. 22:
Head of the statue from Pergamon (21)

FIG. 23: Shield of the Lenormant statuette (1)

FIG. 24: Shield of the Patras statuette (6)

FIG. 25:
Shield of the Conservatori torso (7)

FIG. 26: Strangford shield (31). *British Museum, London*

FIG. 27: Strangford shield (31), detail

FIG. 28: Shield in the Vatican (32). *Museo Chiaramonti*

FIG. 29: Shield in Boston (33). *Museum of Fine Arts*

FIG. 30: Piraeus relief (34): Greek archer in chlamys and Amazon. *Piraeus Museum*

FIG. 31: Piraeus relief (34): the Hair-pulling group. *Piraeus Museum*

FIG. 32: Relief in Copenhagen (34): duelling pair of Greek and Amazon. *Ny Carlsberg Glyptotek, Copenhagen*

FIG. 33: Piraeus relief (34): Seated Amazon. *Piraeus Museum*

FIG. 34: Piraeus relief (34): "Capaneus." *Villa Albani, Rome*

FIG. 35: Piraeus relief (34): Amazon drawing sword. *Piraeus Museum*

FIG. 36: Piraeus relief (34): Amazon fallen headfirst. *Piraeus Museum*

FIG. 37: Relief in Berlin (35). *Staatliche Museen, Berlin*

FIG. 38: Gem by Aspasios (36).
Museo Nazionale, Rome

FIG. 39: Athenian "new style" tetradrachm.
Royal Ontario Museum

Right:
FIG. 40: Silver stater of Nagidus, Cilicia.
British Museum.

Far right:
FIG. 41: Bronze coin of Valerianus, of Priene.
British Museum

Below:
FIG. 42: Gold medallion from South Russia (38).
Hermitage Museum, Leningrad

FIG. 43: Gilded bronze medallion (39). *The Louvre, Paris*

FIG. 44: Terracotta statuette from Switzerland (42).
Musée d'Art et d'Histoire, Geneva

FIG. 45: Terracotta statuette "A" in Exeter (44).
Exeter Museum, England

FIG. 46: Terracotta statuette in Oxford (46).
Ashmolean Museum

FIG. 47:
Terracotta statuette in Marburg (48).
Archaeological Seminar of Marburg University, Germany

FIG. 48: Fragment of a terracotta plaque (49). *Agora Museum, Athens*

FIG. 49: Fragment of a terracotta mould for a plaque (50). *Agora Museum, Athens*

FIG. 50: Fragment of a terracotta replica of the Parthenos shield (51). *Agora Museum, Athens*

FIG. 51: Terracotta medallion (52). *Agora Museum, Athens*

FIG. 52: Terracotta mould from Corinth (53). *Corinth Museum*

FIG. 53: Terracotta head (56). *Collection of Prof. Frank Brommer, Mainz*

FIG. 54: Terracotta medallion (57). *Agora Museum, Athens*

FIG. 55: Terracotta medallion in the Royal Ontario Museum (58)

FIG. 56: a) Terracotta "button" from Ayia Irini, Keos (61)
b) Back view

FIG. 57: a) Megarian bowl in the Royal Ontario Museum (63)

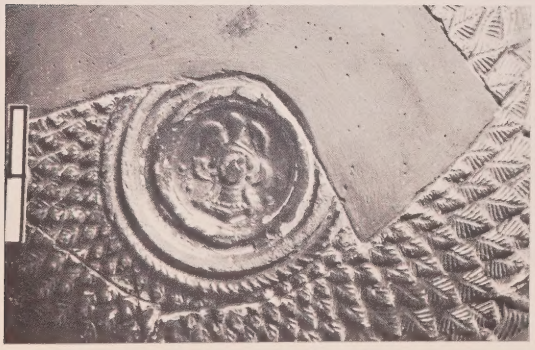


FIG. 57: b) Megarian bowl in the Agora Museum, Athens (64)

FIG. 58: Bronze statuette of Athena Parthenos (69).
Turin Museum, Italy

FIG. 59: Model of Athena Parthenos by M. Simart, 1855

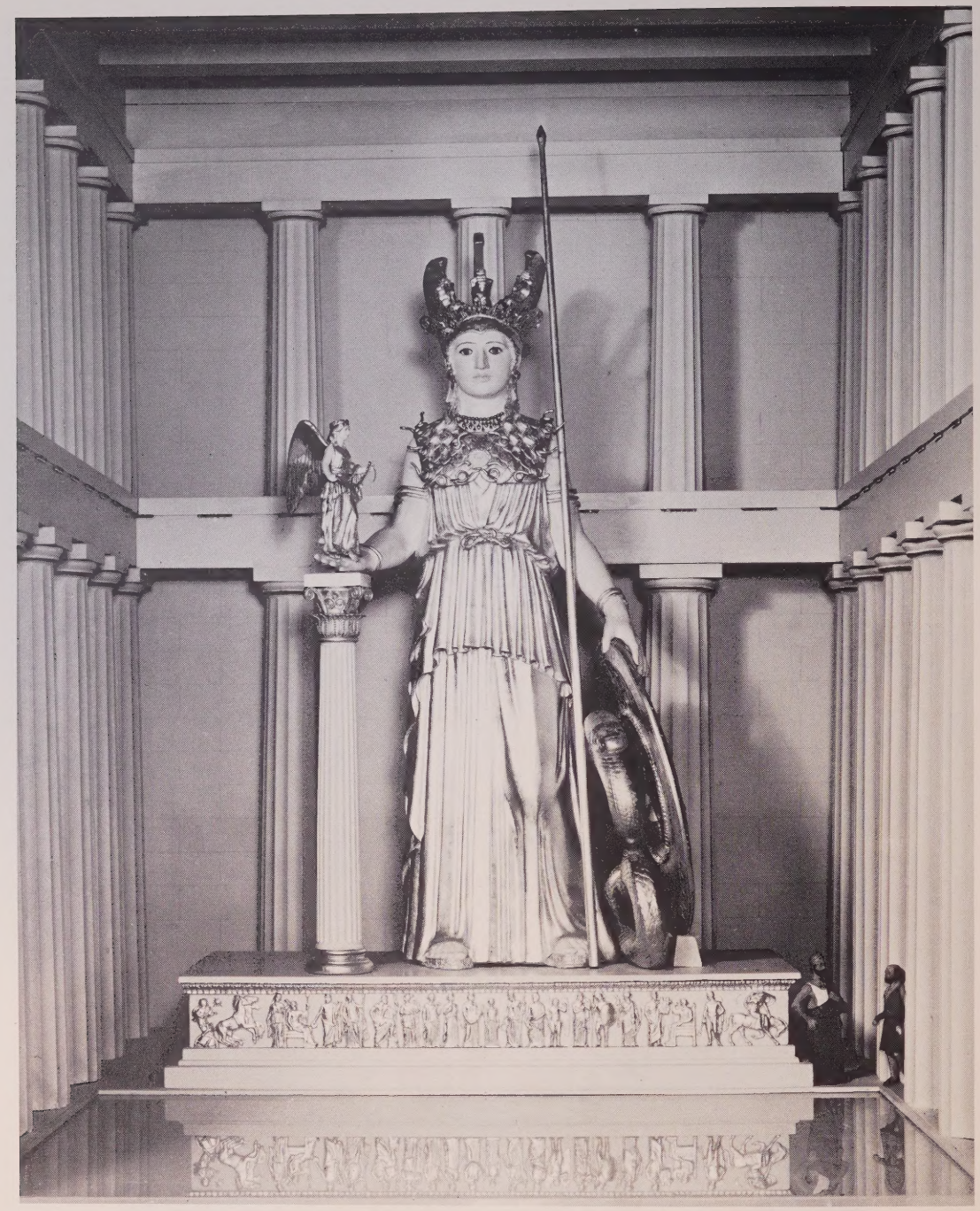


FIG. 60: Royal Ontario Museum model: Parthenos reconstructed in the cella of the temple, general view

FIG. 61: Parthenos base: the remaining blocks *in situ*

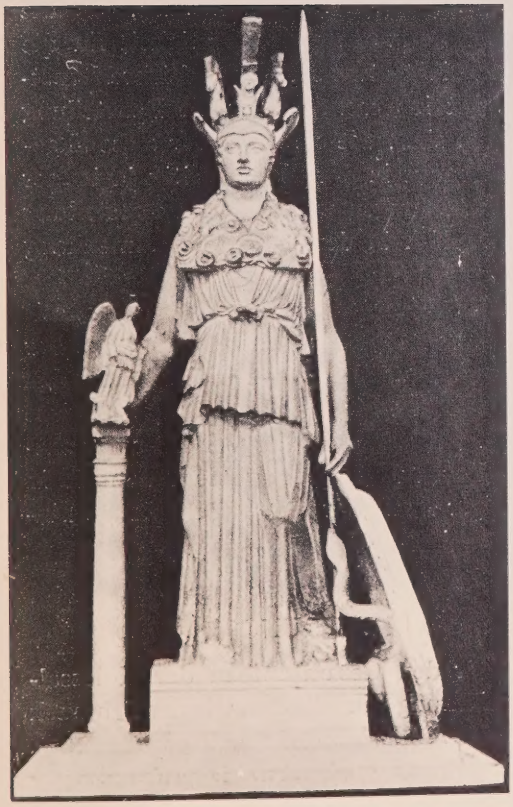


FIG. 62: Reconstruction of the base by K. Lehmann-Hartleben

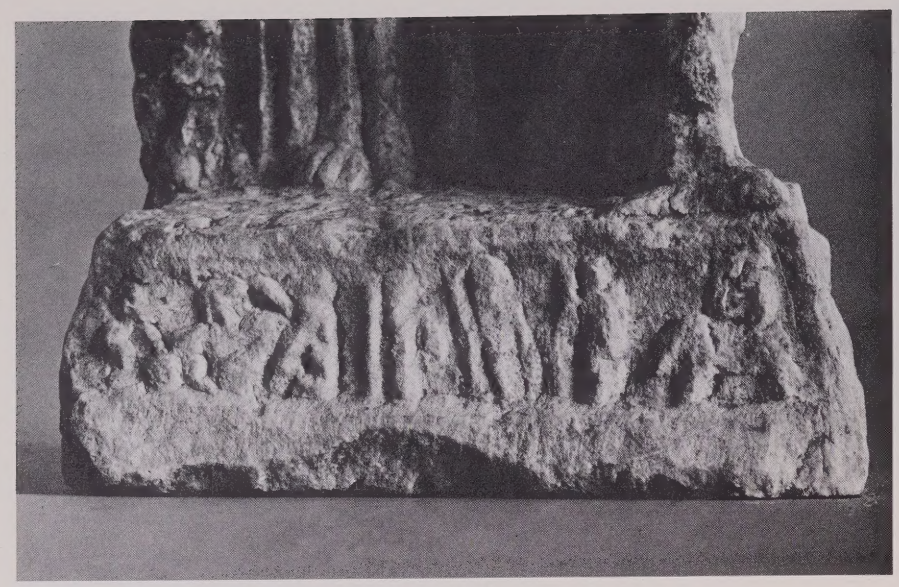


FIG. 63: Base of the Lenormant statuette (1)

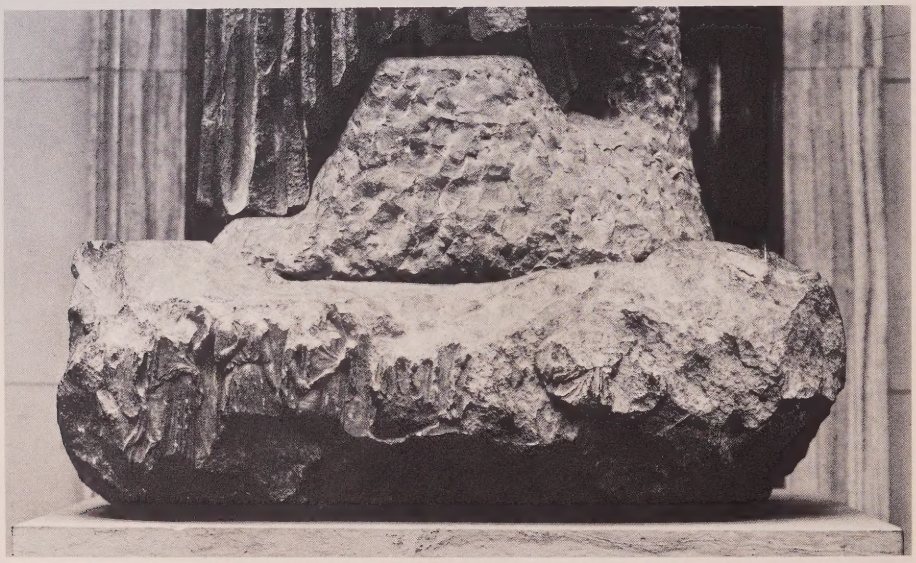


FIG. 64: Base of the Pergamon statue (21)

FIG. 65: Red-figure crater by the Niobid Painter (drawing). *British Museum*

FIG. 66: Neo-Attic relief in the Palazzo del Drago, Rome

FIG. 67: Pandora's Creation on the base of the Parthenos. Praschniker's reconstruction

FIG. 68: ROM reconstruction of the frieze with Creation of Pandora. *Drawing by Sylviia Hahn*

FIG. 69: ROM reconstruction of the base. *Modelled by Sylvia Hahn*

FIG. 70: (*upper left*):
ROM model of the Parthenos, right side view

FIG. 71: (*left*):
ROM model of the Parthenos, three-quarter view of upper part.

FIG. 72: (*above*):
ROM model of the Parthenos, back view

FIGS. 73, 74, 75: Views of marble vase with Centauromachy. *El Prado, Madrid*

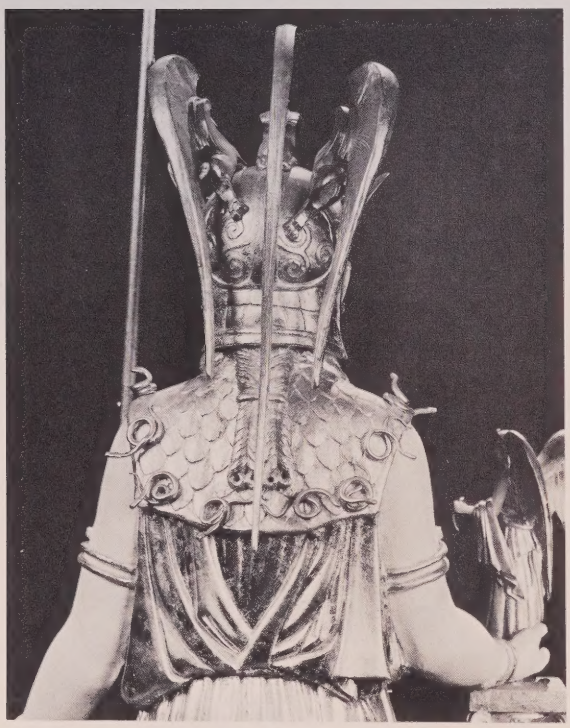


FIG. 76: ROM model of the Parthenos, back view of upper part

FIG. 77: ROM model, detail of helmet and head, right profile

FIG. 78: Nike in Berlin. *Staatliche Museen*

FIG. 79: ROM model, detail showing Nike

FIG. 80: ROM model, right side view of lower part

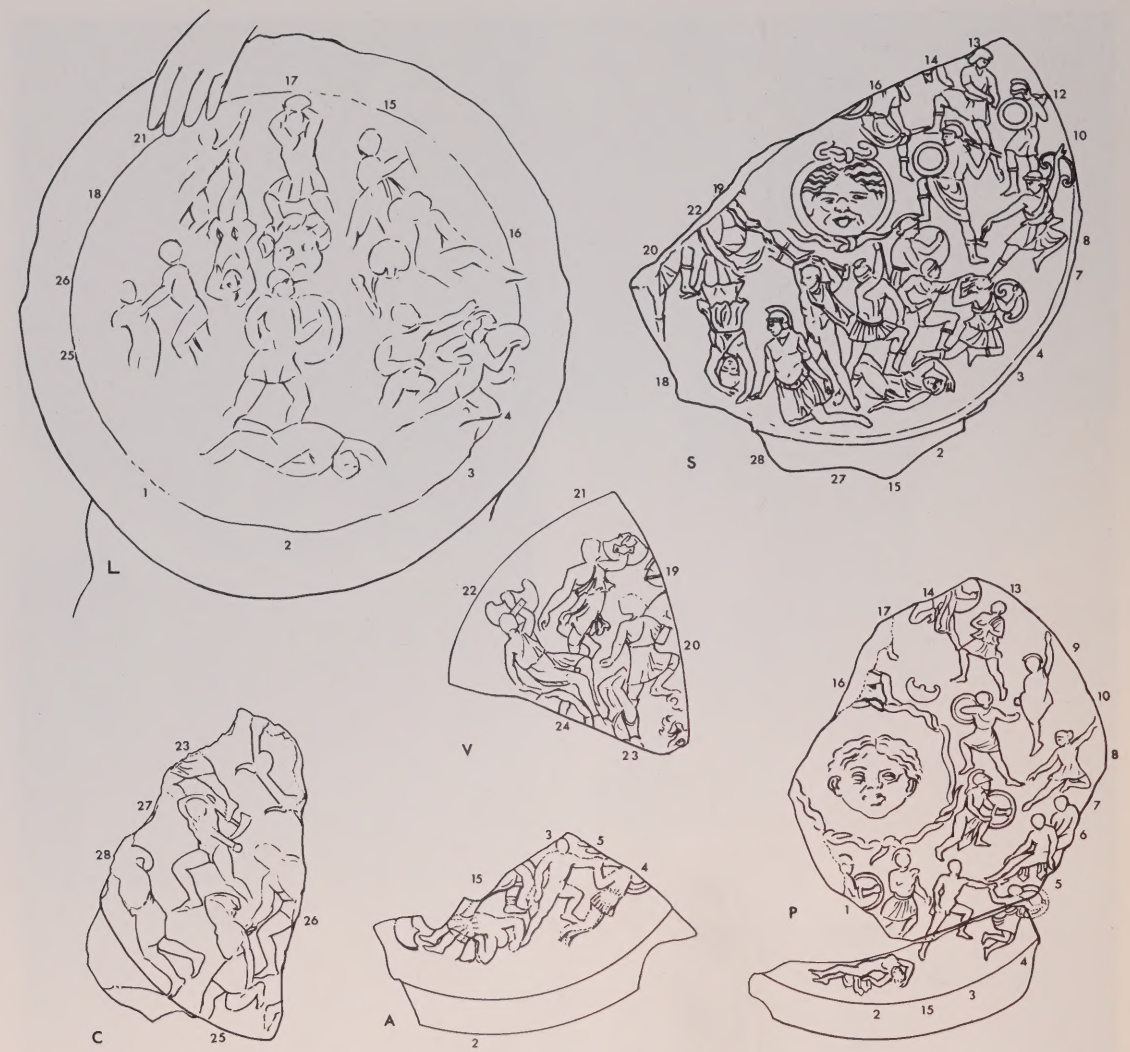


FIG. 81:
Identification of the figures of the Amazonomachy on six copies of the shield: Lenormant (1), Strangford (31), Vatican (32), Conservatori (7), Agora (51), Patras (6):

1 Bearded Greek in profile
2 Supine Amazon
3 Hair-pulling group: Greek
4 Hair-pulling group: Amazon
5 Helper group: wounded Greek
6 Helper group: helper
7 Greek in Corinthian helmet
8 Amazon retreating uphill
9 Greek attacking downhill
10 Backview Amazon with spear
11 Greek archer in chlamys
12 Second backview Amazon
13 Amazon drawing sword
14 "Capaneus"
15 "Pericles"
16 Seated Amazon
17 "Phidias"
18 Amazon falling headfirst
19 Greek with chlamys and sword
20 Amazon with round shield and sword
21 Amazon fleeing downhill
22 Semi-supine Amazon
23 Amazon with axe (?)
24 Greek charging right
25 Knifing group: Amazon
26 Knifing group: Greek
27 Greek with axe
28 Amazon falling prone

FIG. 82: ROM model of the reconstruction of the Amazonomachy on the exterior of the shield

FIG. 83: Synopsis of the reconstructions of the shield by
A) Brommer, B) Schlörb, C) Jeppesen, D) Harrison, E) Strocka, F) Leipen

FIG. 84: Fragment of red-figure crater showing Gigantomachy (drawing). *Museo Nazionale, Naples*

FIG. 85: Gigantomachy on interior of the shield. Graphic reconstruction by F. Vian

FIG. 86: ROM reconstruction of the Gigantomachy (drawing by Sylvia Hahn)

Fig. 87: ROM model of the reconstruction of the Gigantomachy on the interior of the shield